



*Commonwealth of Virginia*

*VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY*

BLUE RIDGE REGIONAL OFFICE

901 Russell Drive, Salem, Virginia 24153

(540) 562-6700 FAX (804) 698 4178

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Matthew J. Strickler  
Secretary of Natural Resources

David K. Paylor  
Director  
(804) 698-4000

Robert J. Weld  
Regional Director

April 13, 2021

Mr. Eldon G. Brammer  
Vice President - Manufacturing  
GP Big Island, LLC  
9909 Lee Jackson Highway  
P.O. Box 40  
Big Island, Virginia 24526

Location: County of Bedford  
Registration No.: 30389

Dear Mr. Brammer:

Attached is a renewal Title V permit to operate your facility pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit will be in effect beginning April 13, 2021.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on January 27, 2021 and solicited written public comments by placing a newspaper advertisement in *The News & Advance* on February 26, 2021. The thirty-day required comment period, provided for in 9VAC5-80-270, expired on March 29, 2021.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

To review any federal rules referenced in the attached permit, the US Government Publishing Office maintains text of these rules at [www.cfr.gov](http://www.cfr.gov), Title 40 Parts 60 and 63.

This permit approval to operate shall not relieve GP Big Island, LLC of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

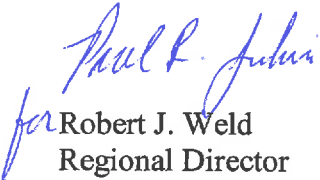
As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director  
Department of Environmental Quality  
P. O. Box 1105  
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the permit writer, Mary Monroe at 540-562-6850 or [mary.monroe@deq.virginia.gov](mailto:mary.monroe@deq.virginia.gov).

Sincerely,

  
for Robert J. Weld  
Regional Director

Attachment: Permit BRRO-30389

cc: Yongtian He, PhD, EPA Region III ([He.Yongtian@epa.gov](mailto:He.Yongtian@epa.gov))  
Logan Squiers, GP Big Island, LLC ([logan.squiers@gapac.com](mailto:logan.squiers@gapac.com))  
Michael Wallman, GP Big Island, LLC ([michael.wallman@gapac.com](mailto:michael.wallman@gapac.com))  
Susan Tripp, DEQ Office of Air Permit Programs (OAPP) ([susan.tripp@deq.virginia.gov](mailto:susan.tripp@deq.virginia.gov))  
Frank Craighead, DEQ BRRO Air Compliance Inspector (electronic)



*Commonwealth of Virginia*

*VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY*

**BLUE RIDGE REGIONAL OFFICE**

901 Russell Drive, Salem, Virginia 24153

(540) 562-6700 FAX (804) 698-4178

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Matthew J. Strickler  
Secretary of Natural Resources

David K. Paylor  
Director  
(804) 698-4000

Robert J. Weld  
Regional Director

**Federal Operating Permit  
Article 1**

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 and Chapter 140 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300, and 9VAC5-140-10 through 9VAC5-140-900 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: GP Big Island, LLC  
Facility Name: GP Big Island, LLC  
Facility Location: 9909 Lee Jackson Highway, Big Island, Virginia  
Registration Number: 30389  
Permit Number: BRRO-30389

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act

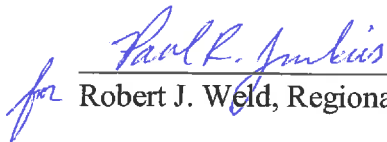
Federally Enforceable Requirements - NO<sub>x</sub> Budget Program Requirements

April 13, 2021

Effective Date

April 12, 2026

Expiration Date

  
Robert J. Weld, Regional Director

April 13, 2021  
Signature Date

Table of Contents, pages 2 through 4  
Permit Conditions, pages 15 through 100  
CAM Plans, pages 101 through 105

## Table of Contents

<b>FACILITY INFORMATION .....</b>	<b>5</b>
<b>EMISSION UNITS .....</b>	<b>6</b>
<b>FUEL BURNING EQUIPMENT REQUIREMENTS – BOILERS (PWR05, PWR06 &amp; PWR07).....</b>	<b>15</b>
LIMITATIONS.....	15
MONITORING .....	20
COMPLIANCE ASSURANCE MONITORING .....	23
RECORDKEEPING.....	24
TESTING.....	27
REPORTING .....	28
<b>MACT SUBPART DDDDD – INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS AND PROCESS HEATERS (PWR05, PWR06 &amp; PWR07) .....</b>	<b>30</b>
EMISSION LIMITATIONS AND WORK PRACTICE STANDARDS.....	30
GENERAL COMPLIANCE REQUIREMENTS .....	31
TESTING AND INITIAL COMPLIANCE REQUIREMENTS.....	32
CONTINUOUS COMPLIANCE REQUIREMENTS.....	36
NOTIFICATIONS, REPORTS AND RECORDKEEPING .....	37
<b>FUEL BURNING EQUIPMENT REQUIREMENTS – ENGINES (ENG02, ENG03, ENG04 &amp; ENG05).....</b>	<b>41</b>
LIMITATIONS.....	41
<b>MACT SUBPART ZZZZ – STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES – (ENG02, ENG03, ENG04 &amp; ENG05) .....</b>	<b>41</b>
GENERAL COMPLIANCE REQUIREMENTS .....	41
EMISSION AND OPERATING LIMITATIONS .....	41
INITIAL COMPLIANCE REQUIREMENTS .....	42
MONITORING .....	42
CONTINUOUS COMPLIANCE REQUIREMENTS.....	42
NOTIFICATIONS, REPORTS AND RECORDKEEPING .....	43
<b>NSPS SUBPART JJJJ – STANDARDS OF PERFORMANCE FOR STATIONARY SPARK IGNITION INTERNAL COMBUSTION ENGINES – (ENG04 &amp; ENG05) .....</b>	<b>44</b>
GENERAL COMPLIANCE REQUIREMENTS .....	44
EMISSION STANDARDS AND OTHER REQUIREMENTS .....	45
COMPLIANCE REQUIREMENTS.....	45
REPORTS AND RECORDS .....	45
<b>PROCESS EQUIPMENT REQUIREMENTS – PULP MILL (PULP02, PULP03 &amp; PULP04).....</b>	<b>45</b>
LIMITATIONS.....	45
MONITORING .....	46
RECORDKEEPING.....	46
<b>MACT SUBPART S – PULP &amp; PAPER INDUSTRY (PULP02, REC04 &amp; REC12) .....</b>	<b>47</b>
GENERAL COMPLIANCE REQUIREMENTS .....	47
STANDARDS FOR THE PULPING SYSTEM (SEMI-CHEMICAL PROCESSES) .....	47
STANDARDS FOR ENCLOSURES AND CLOSED-VENT SYSTEMS .....	48
MONITORING REQUIREMENTS.....	48
RECORDKEEPING REQUIREMENTS.....	50
REPORTING REQUIREMENTS .....	51

TEST METHODS AND PROCEDURES .....	51
<b>PROCESS EQUIPMENT REQUIREMENTS – CHEMICAL RECOVERY (REC13 &amp; REC14).....</b>	<b>52</b>
LIMITATIONS.....	52
MONITORING .....	55
COMPLIANCE ASSURANCE MONITORING .....	57
RECORDKEEPING.....	58
TESTING.....	59
NOTIFICATIONS.....	60
REPORTING .....	60
<b>MACT SUBPART MM – CHEMICAL RECOVERY COMBUSTION SOURCES AT STAND-ALONE SEMICHEMICAL PULP MILLS (REC13) .....</b>	<b>61</b>
GENERAL COMPLIANCE REQUIREMENTS .....	61
STANDARDS .....	61
MONITORING REQUIREMENTS.....	62
PERFORMANCE TEST REQUIREMENTS AND TEST METHODS.....	62
RECORDKEEPING REQUIREMENTS.....	63
NOTIFICATIONS AND REPORTING REQUIREMENTS .....	64
<b>PROCESS EQUIPMENT REQUIREMENTS – MEDIUM MILL (MM01 &amp; MM03) .....</b>	<b>64</b>
LIMITATIONS.....	64
MONITORING .....	65
RECORDKEEPING.....	65
<b>PROCESS EQUIPMENT REQUIREMENTS – LINERBOARD MILL (LBD01, LBD02 &amp; LBD04).....</b>	<b>66</b>
LIMITATIONS.....	66
MONITORING .....	68
RECORDKEEPING.....	69
<b>PROCESS EQUIPMENT REQUIREMENTS – WASTEWATER SYSTEM (WW02 &amp; WW03) .....</b>	<b>70</b>
LIMITATIONS.....	70
MONITORING .....	71
NOTIFICATIONS.....	72
RECORDKEEPING.....	72
<b>MISCELLANEOUS ACTIVITIES (MIS01 &amp; MIS02).....</b>	<b>72</b>
LIMITATIONS.....	72
<b>GENERAL COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS.</b>	<b>73</b>
GENERAL COMPLIANCE REQUIREMENTS .....	73
RECORDKEEPING.....	76
REPORTING .....	76
<b>FACILITY WIDE CONDITIONS .....</b>	<b>77</b>
TESTING.....	79
REPORTING .....	79
<b>INSIGNIFICANT EMISSION UNITS .....</b>	<b>80</b>
<b>PERMIT SHIELD &amp; INAPPLICABLE REQUIREMENTS.....</b>	<b>81</b>
<b>GENERAL CONDITIONS.....</b>	<b>83</b>
<b>NO<sub>x</sub> BUDGET PROGRAM, 9VAC5 CHAPTER 140 .....</b>	<b>93</b>
GENERAL CONDITIONS .....	93
MONITORING .....	94

RECORDKEEPING AND REPORTING..... 97  
TESTING..... 98  
LIABILITY ..... 99  
EFFECT ON OTHER AUTHORITIES ..... 100  
**ATTACHMENT A -- COMPLIANCE ASSURANCE MONITORING PLANS ..... 101**

## **Facility Information**

### **Permittee**

GP Big Island, LLC  
9909 Lee Jackson Highway  
Big Island, Virginia 24526

### **Responsible Official**

Eldon G. Brammer  
Vice President – Manufacturing

### **Facility**

GP Big Island, LLC  
9909 Lee Jackson Highway  
Big Island, Virginia 24526

### **Contact Person**

Logan B. Squiers  
Environmental Leader  
(434) 299-7386

### **County-Plant Identification Number: 51-019-00003**

Facility Description: NAICS 322130 – Paperboard Mills. GP Big Island, LLC (GP) owns and operates a non-sulfur, non-bleaching pulp and paper mill located in Big Island, Virginia (Big Island Mill). The Big Island Mill produces corrugating medium from semichemical (sodium carbonate/sodium hydroxide) hardwood pulp and recycled fiber, and linerboard from recycled fiber. The Big Island Mill's operations are categorized under Standard Industrial Classification (SIC) code 2621 for paper mills.

The Big Island Mill is located in the unincorporated town of Big Island, approximately 12 miles northwest of Lynchburg, Virginia. The main operating area of the Big Island Mill is located along, and just east of, U.S. Highway 501 (Lee Jackson Highway) in Bedford County. This area of the Big Island Mill is bordered on the east side by the James River. The Big Island Mill owns additional land and operates a landfill on the east side of the James River in Amherst County. Both Bedford and Amherst Counties have been designated by the U.S. Environmental Protection Agency (EPA) as "attainment" or "unclassified" for all criteria pollutants. The location of the main process area is approximately 645.5 kilometers (km) East, 4,154.5 km North (Universal Transverse Mercator coordinates, Zone 17, North American Datum 1927) or 79.35° West longitude, 37.53° North latitude.

## Emission Units

Process Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment - Boilers</b>							
PWR01	Fug.	Refuse Handling System, 1977	1,360 tons/day output	---	---	---	---
PWR05	E26, E27	No. 5 Power Boiler: Foster-Wheeler, 3 drum beat with economizer and air preheater, built 1947, installed 1977, gas firing capability added in 2014 [Also primary control device for process non-condensable gases (NCGs)]	339 MMBtu/hr (wood, wood residuals, OCCR); 175 MMBtu/hr (natural gas); 200,000 lb/hr steam output	Multicyclone & Electrostatic Precipitators	PWRCD03 & PWRCD02 (vents to E26) or PWRCD04 (vents to E27)	PM/PM <sub>10</sub>	10/05/12 and 02/04/21
PWR06	E34	Power Boiler No. 6: Foster-Wheeler, D-type package boiler, installed 1995	284.9 MMBtu/hr (natural gas)	Low NO <sub>x</sub> burners and flue gas recirculation	PWRCD05	NO <sub>x</sub>	04/30/12
PWR07	E37	Power Boiler No. 7: Nebraska, A-style package boiler, installed 2011 [Also backup control device for process NCGs]	276 MMBtu/hr (natural gas)	Low NO <sub>x</sub> burners and flue gas recirculation	PWR07-FGR	NO <sub>x</sub>	12/06/10



Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Fuel Burning Equipment - Emergency Engines</b>							
ENG02	P41	Caterpillar – Pulp Mill Emergency Fire Pump (Diesel, 1995)	302 HP	---	---	---	---
ENG03	EG03	Generac - Liner Mill Lift Station Emergency Generator, (Propane, 1998)	87 HP, 65 KW	---	---	---	---
ENG04	EG04	Generac - Main Lift Station Emergency Generator, (Natural Gas, 2014)	268 HP, 200 KW	---	---	---	---
ENG05	EG05	Caterpillar Model DG50-2 - Sanitary Package Plant Emergency Generator, (Propane, 2019)	61.7 HP, 50 KW	---	---	---	---

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
Pulp Mill							
PULP02		Digester System which includes, but is not limited to:	864 ODTPD output	Capture and control of Total HAP emissions from the digesters/ defiberators and blow tank in accordance with MACT I (MACT S) LVHC sources	PWR05 (Primary) PWR07 (Backup)	Total HAP Emissions	---
	P21, P22, P23, P24	(4) Blowback Collection Boxes	---				
	E26, E27, E37	(4) Digester Screw Feeders	---				
		No. 1 Digester, prior to 1950	275 ODTPD				
		No. 2 Digester, prior to 1950	275 ODTPD				
		No. 4 Digester, 1967	275 ODTPD				
		No. 5 Digester, 1972	275 ODTPD				
		(4) Digester Defibrators	---				
		Blow Tank, 2000	36,849 gal				
		(4) Blow Line Refiners	864 ODTPD output				
		Refiner Feed Tank,	23,000 gal				
		(2) Hot Stock Refiners,	864 ODTPD output				
		Screen Feed Tank,	33,950 gal				
		(2) Screens,	864 ODTPD output				
		Washer Feed Tank	26,450 gal				
			Capture and control of Total HAP emissions from the Washer Bldg. Refiner feed tank, Screen feed tank, and Washer feed tank in accordance with MACT I (MACT S) LVHC sources.				

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
PULP03		Pulp Washer system: which includes, but is not limited to:	864 ODTPD output	---	---	---	002/04/21
	P44	(1) Pulp washer	---				
	P42	Washer Filtrate Tank,	57,000 gal				
	---	Black Liquor Screen	200 TPD BLS				
PULP04	---	Semichemical Pulp Storage: which includes, but is not limited to:	---	---	---	---	---
	P34	High Density Tank installed 1986	582,000 gal				
	M12, M13	Low Density Chest, installed 1961	65,700 gal				
	M14, M15	PM1 Blend Chest/Machine Chest, installed 1961	63,000 gal				
	M41	PM3 Blend Chest installed 1957	71,300 gal				
	M103	PM3 Machine Chest	65,000 gal				

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Chemical Recovery</b>							
REC03	---	Weak Black Liquor Storage: including but not limited to:	---	---	---	---	---
	R44	Intermediate Storage Tank, 1965	39,900 gal	---	---	---	
	R51	UR WBL Storage Tank, 1974	580,000 gal	---	---	---	
	R53	WBL #1 Tank, 1996	906,500 gal	---	---	---	
	R54	WBL Surge Tank, prior to 1971	16,900 gal	---	---	---	
	R58	WBL #2 Tank, 2005	906,500 gal	---	---	---	
REC04	E26, E27, E37	Multi-Effect Evaporator System, (1989): which includes, but is not limited to:	287 TBLS/day output	Capture and control of Total HAP emissions in accordance with MACT I (MACT S)	PWR05 (Primary) PWR07 (Backup)	Total HAP Emissions	---
	R12	Hot Well	---				
	---	Surface Condenser	---				
	---	Inter-Condenser/After-Condenser	---				
REC05	R41, R42, R43	Strong Black Liquor Storage Tank, 1981	100,000 gal	---	---	---	---
	R60	Strong Black Liquor Storage Tank, 2009	50,000 gal	---	---	---	
	R61	Dump Tank, 2002	1,600 gal	---	---	---	

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
REC12	E26, E27, E37	Blow Heat Evaporator System, 2001 After-Condenser	194.4 TBLS/day	Capture and control of Total HAP emissions in accordance with MACT I (MACT S)	PWR05 (Primary) PWR07 (Backup)	Total HAP Emissions	---
REC13	REC57	Recovery Furnace	400,000 lb/day BLS 104.0 MMBtu/hr (natural gas)	Electrostatic Precipitator	RECCD03	PM/PM <sub>10</sub>	05/01/08
REC14	REC59	Smelt Dissolving Tank	400,000 lb/day BLS	Dynamic Wet Scrubber	RECCD04	PM/PM <sub>10</sub>	05/01/08

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Medium Mill</b>							
MM01	M7, M8, M18, M21, M22, M23, M25 thru M29, M34, M35, M36, M38	No. 1 Paper Machine, Pussey and Jones 100-inch trim (1928), rebuilt 1956. Valmet headbox, System 3, installed 1990. Voith press section, installed 1995. A & F winder, installed 1988. Stuff Box, Couch Pit, Seal Pit, Press Pit, Dry End Pulper, Wire Pit, Vacuum Pumps (6).	355 tons/day output	---	---	---	---
MM03	M49 thru M58, M61, M62, M64 thru M68, M71, M74 thru M77, M81, M82, M88, M91	No. 3. Paper Machine, Beloit 168-inch trim (1959). Extended Nip press, installed 1985. Beloit headbox, System 3, installed 1984. Wartsila Winder, KL 500, installed 1984. Stuff Box, Couch Pit, Seal Pit Dry End Pulper, Wire Pit, Press Pit, Vacuum Pumps (8).	842 tons/day output	---	---	---	---
	M103	Whitewater Tank, 1997	200,000 gal				
	P43	Whitewater Tank, 1964	23,200 gal				

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Linerboard Mill</b>							
LBD01	L17	Recycled Fiber Facility (OCC)	1,400 Oven Dried Tons (ODT) pulp/day; 511,000 ODT pulp/year	---	---	---	04/30/12
LBD02	L18	Starch Silo	150 tons storage	Fabric Filter	LBDCD01	PM	04/30/12
LBD04	L3 thru L6, L9, L11, L15	No. 4 Paper Machine, 184 inch wide Valmet paper machine and support equipment (1995, new headbox 2009), including but not limited to: - Base sheet machine chest, base sheet blend chest, top sheet machine chest, leveling chest, OCC low density storage chest, base sheet primary screen, base sheet secondary screen, broke storage chest unfiltered whitewater chest, base sheet stuff box, topsheet stuff box, flat box seal pit, top sheet off-machine silo, top sheet primary screen press pit pulper, excess clear whitewater, whitewater gravity strainer, strained whitewater chest, saveall, saveall filtrate chest couch pit, press pit, Uhle box seal pit, dry end pulper, reclaim water chest, vacuum pump sump, wire pit, winder.	1,331 Air Dried Tons (ADT) finished paper/day; 485,972 ADT finished paper/year	---	---	---	04/30/12

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
<b>Wastewater System</b>							
WW02	Fug.	Industrial Wastewater Treatment (1977), including, but not limited to: - Medium mill lift station, power/recovery lift station, primary clarifiers, nutrient tank, scum sump, equalization basin, aeration basin, polishing pond, foam control chest, sludge lift station, (2) sludge tanks, (2) decant lift stations, sludge press filtrate pump, #4/OCC lift station, (2) sludge holding ponds, lime-sludge blender, (2) lime conveyors.	12 MGD output	---	---	---	---
WW03	WW-01	Lime Silo and covered conveyors, 2002	50 tons	Baghouse Filter	WWCD01	PM/PM <sub>10</sub> / PM <sub>2.5</sub>	07/10/02
<b>Miscellaneous Activities</b>							
MIS01	Fug.	Paved Roads	---	---	---	---	---
MIS02	Fug.	Unpaved Roads	---	---	---	---	---

\*The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

**Notes:** Abbreviations: DR WBL = "Down River" Weak Black Liquor; Fug. = fugitive; OCC = Old corrugated containers; OCCR = OCC rejects; ODTPD = Oven Dry Tons of Pulp per Day; TBLS = Tons of Black Liquor Solids; TPD = Tons per Day; UR WBL = "Up River" Weak Black Liquor; WBL = Weak Black Liquor



## **Fuel Burning Equipment Requirements – Boilers (PWR05, PWR06 & PWR07)**

### **Limitations**

1. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - Particulate matter and PM<sub>10</sub> emissions from the No. 5 Power Boiler shall be controlled by the existing multiclone and ESP(s). The multiclone and ESP(s) shall be provided with adequate access for inspection.  
 (9VAC5-80-110, Condition 2 of 10/05/12 Permit Document and Condition 3 of 02/04/21 Permit Document)
2. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - The approved fuels for the No. 5 Power Boiler are wood, Old Corrugated Container Reject (OCCR) material and natural gas. A change in the fuels may require a permit to modify and operate.
  - a. For the OCCR material, the permittee shall maintain records in accordance with Condition 33.f.  
 (9VAC5-80-110 and Condition 4 of 02/04/21 Permit Document)
3. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - Coal shall meet the specifications below:
  - a. Maximum sulfur content per shipment: 1.3% as determined by ASTM D3177, D4239 or VDEQ-approved equivalent method.  
 (9VAC5-80-110 and Condition 7 of 10/05/12 Permit Document)
4. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - The No. 5 Power Boiler shall combust no more than 7.5 tons/hour, 180 tons/day, or 65,700 tons/year, calculated monthly as the sum of each consecutive 12 months, of OCCR. These throughput limits shall be measured on an "as received" basis per year.  
 (9VAC5-80-110 and Condition 8 of 02/04/21 Permit Document)
5. **Fuel Burning Equipment Requirements – (PWR05) – Limitations\*** - Total emissions from the operation of the No. 5 Power Boiler shall not exceed the limits specified below:

Pollutants	Emission Limits			
	lb/MMBtu	ppmvd	lb/hr	tons/yr
Particulate Matter	0.07	-	23.7	103.9
PM <sub>10</sub>	0.07	-	20.3	88.9
Sulfur Dioxide	-	-	23.9	104.7
Nitrogen Oxides (as NO <sub>2</sub> )	-	-	121.0	529.9
Carbon Monoxide	-	630 (30-day rolling)	-	763

Pollutants	Emission Limits			
	lb/MMBtu	ppmvd limit at 3% O <sub>2</sub> )	lb/hr	tons/yr
Volatile Organic Compounds	-	-	56.4	246.9

\* Boiler No. 5 (PWR05) is subject to MACT DDDDD. See the MACT DDDDD section for additional emission limitations.

(9VAC5-80-110, Condition 8 of 10/05/12 Permit Document and Condition 18 of 02/04/21 Permit Document)

6. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - Visible emissions from the ESP exhaust stacks (E26 and E27) shall not exceed twenty (20) percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
 (9VAC5-80-110 and Condition 20 of 02/04/21 Permit Document)
  
7. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:
  - a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
  - b. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.
  - c. The permittee shall have available written operating procedures for the related air pollution control equipment. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures. These procedures shall be based on the manufacturer's recommendations, at minimum. The permittee shall maintain records of training provided including names of trainees, date of training and nature of training.

These records shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.  
 (9VAC5-80-110 and Conditions 27 and 28 of 02/04/21 Permit Document)
  
8. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - Nitrogen oxide emissions from the No. 5 Power Boiler shall be controlled by an overfire air system or an alternative control technology as approved by VDEQ to provide equal or greater control.  
 (9VAC5-80-110 and Condition 3 of 10/05/12 Permit Document)
  
9. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - Sulfur dioxide emissions from the No. 5 Power Boiler shall be controlled by a good operation practice to

minimize emissions and by firing coal to a maximum of ten percent of the annual capacity factor for this boiler. Capacity factor shall be determined on the basis of heat content of the coal fired and calculated as the ratio between the actual heat input of coal during the preceding 12-month period and the potential heat input for this boiler had it been operated for 8760 hours at the maximum steady state design heat input capacity of 2,969,900 MMBTU/yr.

(9VAC5-80-110 and Condition 4 of 10/05/12 Permit Document)

10. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - Future applications for the replacement of any of the required pollution control equipment cited in the 10/05/12 State Operating Permit shall include a BART cost and impact analysis, as well as a standard BACT analysis, if required.  
(9VAC5-80-110 and Condition 5 of 10/05/12 Permit Document)
11. **Fuel Burning Equipment Requirements – (PWR05) – Limitations** - Emission control equipment shall be maintained and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations.  
(9VAC5-80-110 and Condition 6 of 10/05/12 Permit Document)
12. **Fuel Burning Equipment Requirements – (PWR06) – Limitations** - Nitrogen Oxides emissions from Power Boiler No. 6 shall be controlled by low NO<sub>x</sub> burners and flue gas recirculation.  
(9VAC5-80-110 and Condition 2 of 04/30/12 Permit Document)
13. **Fuel Burning Equipment Requirements – (PWR06) – Limitations** - The approved fuel for Power Boiler No. 6 is natural gas. A change in fuel may require a permit to modify and operate.  
(9VAC5-80-110 and Condition 7 of 04/30/12 Permit Document)
14. **Fuel Burning Equipment Requirements – (PWR06) – Limitations** - Power Boiler No. 6 shall consume no more than  $2,427 \times 10^6$  cubic feet of natural gas, calculated as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-110 and Condition 9 of 04/30/12 Permit Document)
15. **Fuel Burning Equipment Requirements – (PWR06) – Limitations** - Power Boiler No. 6 emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the Department.

(9VAC5-80-110 and Condition 10 of 04/30/12 Permit Document)

16. **Fuel Burning Equipment Requirements – (PWR06) – Limitations** - Visible emissions from the Power Boiler No. 6 shall not exceed 10 percent opacity, except for one six-minute period per hour which shall not exceed 20 percent opacity. Visible emission evaluations shall be in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
 (9VAC5-80-110 and Condition 18 of 04/30/12 Permit Document)

17. **Fuel Burning Equipment Requirements – (PWR06) – Limitations** - Emissions from the operation of Power Boiler No. 6 shall not exceed the limits specified below:

Pollutants	Emission Limits		
	lb/MMBtu	lb/hr	tons/yr
<b>Particulate Matter (PM)</b>	-	0.85	3.7
PM <sub>10</sub>	-	0.85	3.7
<b>Sulfur Dioxide</b>	-	0.17	0.7
<b>Nitrogen Oxides (as NO<sub>2</sub>)</b>	0.0315 (30-day rolling avg.)	8.97	39.3
<b>Carbon Monoxide</b>	-	15.4	67.5
<b>Volatile Organic Compounds</b>	-	0.80	3.5
<b>Formaldehyde</b>	-	0.02	0.09

(9VAC5-80-110, 40 CFR 60.44b(a) and Condition 17 of 04/30/12 Permit Document)

18. **Fuel Burning Equipment Requirements – (PWR06) – Limitations** - In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:
- Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request.
  - Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.

(9VAC5-80-110 and Condition 27 of 04/30/12 Permit Document)

19. **Fuel Burning Equipment Requirements – (PWR07) – Limitations** - Emissions from Power Boiler No. 7 shall be controlled by low NO<sub>x</sub> burners with flue gas recirculation. The low NO<sub>x</sub> burners shall be installed and operated in accordance with manufacturer's specifications.  
 (9VAC5-80-110 and Condition 2 of 12/06/10 Permit Document)

20. **Fuel Burning Equipment Requirements – (PWR07) – Limitations** - The approved fuel for Power Boiler No. 7 is natural gas. A change in fuel may require a permit to modify and operate.  
 (9VAC5-80-110 and Condition 3 of 12/06/10 Permit Document)

21. **Fuel Burning Equipment Requirements – (PWR07) – Limitations** - Emissions from the operation of Power Boiler No. 7 shall not exceed the limits specified below:

Pollutants	Emission Limits		
	lb/MMBtu	lb/hr	tons/yr
PM <sub>10</sub>	0.005	-	6.1
Sulfur Dioxide	-	5.05	22.12
Nitrogen Oxides (as NO <sub>2</sub> )	0.0315 (30 day rolling avg.)	8.7	38.1
Carbon Monoxide	0.05	-	60.4
Volatile Organic Compounds	0.0028	-	3.5
Sulfuric Acid Mist (SAM)	0.001	-	1.0

(9VAC5-80-110, 40 CFR 60.44b(a) and Condition 6 of 12/06/10 Permit Document)

22. **Fuel Burning Equipment Requirements – (PWR07) – Limitations** - Visible emissions from Power Boiler No. 7 shall not exceed 10 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
 (9VAC5-80-110 and Condition 7 of 12/06/10 Permit Document)
23. **Fuel Burning Equipment Requirements – (PWR07) – Limitations** - At all times, including periods of start-up, shutdown, soot blowing, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to Power Boiler No. 7:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.  
(9VAC5-80-110 and Condition 18 of 12/06/10 Permit Document)

### **Monitoring**

24. **Fuel Burning Equipment Requirements – (PWR05) – Monitoring** - Continuous emission monitoring systems (CEMS) for opacity and carbon monoxide are required as stated below in a and b.

- a. Opacity CEMS shall be installed, calibrated, maintained, and operated as specified below to monitor and record opacity from the ESP stacks (E26 and E27).
  - i. The permittee shall check the zero and span drift in accordance with the provisions of 9VAC5-40-41.B.2.
  - ii. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS shall be in continuous operation and shall complete a minimum of one cycle of sampling and analyzing for each successive 15-second period and one cycle of data recording for each successive six-minute period.
  - iii. The permittee shall reduce all COMS data to six-minute averages for six-minute periods. Six-minute opacity averages shall be calculated from 24 or more data points spaced at approximately equal intervals over each six-minute period. Data recorded during periods of system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages computed under this Condition.

(9VAC5-80-110 and 9VAC5-40-40)

- b. A Continuous Emission Monitoring System (CEMS) including the oxygen monitoring system shall be installed, calibrated, maintained, audited and operated in accordance with 40 CFR 63.7525 (or alternative methods as approved by the Department of Environmental Quality) to measure and record the emissions of carbon monoxide in ppmvd and the oxygen content of the flue gases from PWR05. Data shall be reduced to 30-day rolling averages per the procedures in 40 CFR 63.7525 to demonstrate compliance with the emission standard as noted in Condition 5 except data during startup and shutdown of PWR05 shall not be included.

(9VAC5-80-110 and Condition 15 of 02/04/21 Permit Document)

- c. A performance evaluation of the carbon monoxide continuous monitoring system, including the oxygen monitoring system shall be performed per the procedures of 40 CFR 63.7525 within 60 days of the installation and operation of the system(s).  
(9VAC5-80-110 and Condition 16 of 02/04/21 Permit Document)
25. **Fuel Burning Equipment Requirements – (PWR05) – Monitoring** - All active pollution control devices required by the 10/05/12 Permit Document or subsequently approved as replacements for such devices shall be equipped with one or more devices to continuously monitor the performance of the control device. Such monitors may include but are not limited to primary and secondary voltages for electrostatic precipitators and liquid flow rate and air pressure drop for the scrubber. Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the respective emission unit is operating except for system breakdowns, repairs, calibration checks, and zero and span adjustments. The specific monitoring requirements for each pollution control device shall be addressed in the Compliance Assurance Monitoring (CAM) Plan included in each renewal of the facility's federal operating permit. Control devices required for BART compliance shall be included in the CAM Plan irrespective of the uncontrolled emission potential of the controlled emission unit.  
(9VAC5-80-110 and Condition 9 of 10/05/12 Permit Document)
26. **Fuel Burning Equipment Requirements – (PWR06) – Monitoring** - Continuous emissions monitoring systems shall be installed to measure and record the concentration of nitrogen oxides, and CO<sub>2</sub> or O<sub>2</sub> emissions from Power Boiler No. 6. The monitoring systems shall be designed, installed, maintained, evaluated, calibrated and operated in accordance with 40 CFR 60 Subpart A, 40 CFR 60 Subpart Db, and 40 CFR 60, Appendices B and F. During all periods of Power boiler No. 6 operation, the nitrogen oxides monitoring system and the CO<sub>2</sub> or O<sub>2</sub> monitoring system shall be in continuous operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments.  
(9VAC5-80-110, 40 CFR 60.48b and Condition 11 of 4/30/12 Permit Document)
27. **Fuel Burning Equipment Requirements – (PWR06 & PWR07) – Monitoring** - At least one time per calendar week an observation of the presence of visible emissions from the Power Boiler No. 6 and Power Boiler No. 7 stacks shall be made. If visible emissions are observed, the permittee shall:
- a. take timely corrective action such that the affected boiler, with visible emissions, resumes operation with no visible emissions, or,
  - b. conduct a visible emission evaluation (VEE) on the affected boiler stack in accordance with 40 CFR 60, Appendix A, Method 9 for a minimum of six minutes to assure

visible emissions from the stack do not exceed 10 percent opacity. If any of the observations exceed the opacity limitation of 10 percent, the observation period shall continue until a total of sixty (60) minutes of observations have been completed. Timely corrective action shall be taken, if necessary, such that the boiler resumes operation within the 10 percent opacity limit.

- c. If visible emissions observations conducted for a particular source during twelve consecutive weeks show no visible emissions, the permittee with DEQ concurrence, may reduce the monitoring frequency to once per calendar month for that source. Any time the monthly visible emissions inspections show observable opacity, or when requested by DEQ, the monitoring frequency shall be increased to once per week.

The permittee shall maintain a log for each boiler stack to demonstrate compliance with this condition. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action and the name of the observer. If the boiler has not been operated for any period during the entire week, it shall be noted in the log book.

(9VAC5-80-110 E & K)

28. **Fuel Burning Equipment Requirements – (PWR06 & PWR07) – Monitoring** - The permittee shall install a steam flow monitoring system to continuously measure and record steam flow. The system shall include steam meters to measure the Power boilers No. 6 and 7 output (M6 and M7), the Linerboard Mill input (MM), and the Power boilers No. 6 and 7 deaerator input (MC6 and MC7). The steam flow monitoring system shall measure the flow through each of the meters and shall report all flows at a single, temperature and pressure compensated, steam quality.

The permittee shall install a fuel flow monitoring system to continuously measure and record fuel flow to Power Boilers No. 6 and 7. The system shall include meters for each fuel train for Power Boilers No. 6 and 7.

The permittee shall have available quality control/quality assurance (QC/QA) plans for both the steam flow monitoring system and the fuel flow monitoring system. The content of and format of the QC/QA plans shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office. These plans shall include, but are not limited to:

- a. procedures and schedules for calibration and maintenance for each meter and its associated transmitters, and
- b. the algorithm for data manipulation in the Data Acquisition system; including the procedures to be used for substituting for any missing data in Equations 1, 2, 3, 4 or 5 of the Compliance Determination Procedures attached to 4/30/12 Permit Document.



***This portion of this condition has been completed*** – The permittee shall submit approvable QC/QA plans to the DEQ not later than thirty (30) days prior to initial Power Boiler No. 6 startup.

(9VAC5-80-110 and Condition 22 of 04/30/12 Permit Document)

29. **Fuel Burning Equipment Requirements – (PWR06 & PWR07) – Monitoring** - For each calendar day, the relationship  $M_M + M_{C6} + M_{C7} - (M_6 + M_7)$  shall be evaluated on a consistent steam quality basis. If the result of the relationship is greater than zero, the permittee shall calculate the daily nitrogen oxide emissions in accordance with Equation #3 of the Compliance Determination Procedures attached to 4/30/12 Permit Document. If the result of Equation #3 is greater than zero, the permittee shall report in writing to the Air Compliance Manager, Blue Ridge Regional Office within 14 days.  
(9VAC5-80-110 and Condition 23 of 04/30/12 Permit Document)
30. **Fuel Burning Equipment Requirements – (PWR07) – Monitoring** - Continuous Emission Monitoring Systems meeting the design specifications of 40 CFR Part 60, Appendix B, shall be installed to measure and record the emissions of Nitrogen Oxides in lb/MMBtu and either the oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gas from Power Boiler No. 7. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with DEQ approved procedures which are equivalent to the requirements of 40 CFR 60.13, Subpart Db and Appendices B and F. Data shall be reduced to 30 day rolling averages in accordance with 40 CFR Part 60, Subpart Db.  
(9VAC5-80-110, 40 CFR 60.48b and Condition 9 of 12/06/10 Permit Document)
31. **Fuel Burning Equipment Requirements –(PWR07) – Monitoring** - A CEMS quality control program which meets the requirements of 40 CFR 60.13 and Appendix B or F shall be implemented for all continuous monitoring systems.  
(9VAC5-80-110 and Condition 11 of 12/06/10 Permit Document)

### **Compliance Assurance Monitoring**

32. **Fuel Burning Equipment Requirements – (PWR05) - Compliance Assurance Monitoring** - The permittee shall implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor the electrostatic precipitators (PWRCD03 and PWRCD04) controlling PM<sub>10</sub> from the No. 5 Power Boiler (PWR05). For the purposes of this permit, PM<sub>10</sub> from the No. 5 Boiler is referred to as “PSEU 1” with the acronym PSEU standing for Pollutant Specific Emissions Unit. The approved monitoring plan shall be the attached CAM Plan (Attachment A, Table I) or the most recent revision to this plan that has been: (1) developed and approved pursuant to 40 CFR 64.7(e) and Condition 208; (2) revised pursuant to a Quality Improvement Plan in accordance with 40 CFR 64.8 and Condition 209; or (3) otherwise approved by the DEQ conforming with Condition 202, including, but not limited to, changes initiated by DEQ.  
(9VAC5-80-110 and 40 CFR 64.6(c))

## **Recordkeeping**

33. **Fuel Burning Equipment Requirements – (PWR05) – Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:
- a. The yearly consumption of wood fuel on Power Boiler No. 5 calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - b. The daily and yearly consumption of OCCR fuel on Power Boiler No. 5. The yearly consumption shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - c. The yearly consumption of natural gas on Power Boiler No. 5 calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - d. Records required in Condition 217.
  - e. Continuous monitoring system data, calibrations and calibration checks, percent operating time, and excess emissions.
  - f. Records specified in 40 CFR 60.2740(u).  
(40 CFR 60.2740(u))

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9VAC5-80-110 E & K, 40 CFR 60.2740(u) and Condition 22 of 02/04/21 Permit Document)

34. **Fuel Burning Equipment Requirements – (PWR05) – Recordkeeping** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Monthly and annual fuel consumption of each fuel fired in the No. 5 Power Boiler. Fuel consumption records shall be based on a daily average feed rate.
- b. Records of sulfur content for each shipment of coal used in the No. 5 Boiler.
- c. Measured or estimated monthly and annual particulate matter, PM<sub>10</sub>, sulfur dioxide and nitrogen oxides emissions of the No. 5 Power Boiler. Estimated emissions shall be calculated by a methodology acceptable to VDEQ.
- d. The annual capacity factor for coal usage in the No. 5 Power Boiler calculated monthly, based on the annual fuel usage at the end of each calendar month.
- e. Calculated maximum hourly emissions of the No. 5 Power Boiler, which may be based either on measurements or engineering estimates or a combination. Maximum hourly emissions as a daily average may be acceptable on a case-by-case basis. Estimated emissions shall be calculated by a methodology acceptable to VDEQ. This calculation shall be checked, at a minimum, for each semi-annual compliance certification.
- f. Details of any method used for estimation of emissions above.
- g. Monitoring records for all pollution control devices required by the 10/05/12 Permit Document, as specified in the facility CAM plan.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and Condition 11 of 10/05/12 Permit Document)

35. **Fuel Burning Equipment Requirements – (PWR06) – Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. The daily and annual consumption of natural gas. The annual consumption shall be calculated as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. Quality control/quality assurance (QC/QA) plans for both the steam flow monitoring systems and the fuel flow monitoring systems as required in Condition 28.
- c. Records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of Power Boiler No. 6; any malfunction of the air pollution control

equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

- d. An annual calculation of Equation #4 of the Compliance Determination Procedures attached to 04/30/12 Permit Document. The calculation shall include justification and documentation for each emission factor, higher heating value, annual fuel consumption value, and steam flow value used. The annual calculation shall be calculated as the sum of each consecutive 12-month period. If the result of Equation #4 is greater than 42.65 tons per year, the permittee shall report in writing to the Air Compliance Manager, Blue Ridge Regional Office within 14 days. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- e. An annual calculation of Equation #5 of the Compliance Determination Procedures attached to 04/30/12 Permit Document. The calculation shall include justification and documentation for the sulfur content, each annual fuel consumption value, and each steam flow value used. The annual calculation shall be calculated as the sum of each consecutive 12 month period. If the result of Equation #5 is greater than 46.30 tons per year, the permittee shall report in writing to the Air Compliance Manager, Blue Ridge Regional Office within 14 days. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- f. The maintenance, training and associated records required by Conditions 15 and 18.
- g. Visible emission observation logs required by Condition 27.
- h. The steam flow monitoring system and fuel flow monitoring system records required by Condition 28.
- i. Records as required in accordance with 40 CFR 60.49b.  
(40 CFR 60.49b)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110, 40 CFR 60.49b and Condition 21 of 04/30/12 Permit Document)

36. **Fuel Burning Equipment Requirements – (PWR07) – Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Monthly and annual consumption of natural gas. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. Monthly and annual operating time that Power Boiler No. 7 serves as the control device for emissions from the LVHC system.
- c. Scheduled and unscheduled maintenance and operator training.
- d. Continuous monitoring system calibrations and calibration checks, percent operating time, and excess emissions.
- e. Results of all stack tests and performance evaluations.
- f. Reports as required in Condition 47.
- g. Visible emission observation logs required by Condition 27.
- h. Records as required in accordance with 40 CFR 60.49b.  
(40 CFR 60.49b)

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110, 40 CFR 60.49b and Condition 13 of 12/06/10 Permit Document)

## Testing

37. **Fuel Burning Equipment Requirement – (PWR05) – Testing** - At a frequency not to exceed once every five years, the permittee shall conduct a stack test at stack E26 (utilizing ESP control device PWRC02) and at stack E27 (utilizing ESP control device PWRC04) to demonstrate compliance with the pound per million BTU emission limit for particulate matter contained in Condition 5 of this permit. The test at stack E26 shall be performed concurrently with the test at stack E27. The test shall be conducted and reported and data reduced as set forth in 9VAC5-50-30. The details of the tests shall be arranged with the Blue Ridge Regional Office.  
(9VAC5-80-110 E & K)
38. **Fuel Burning Equipment Requirements – (PWR05) – Testing** - At a frequency not to exceed five years, the permittee shall conduct a stack test for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> and VOC from the No. 5 Power Boiler to demonstrate compliance with the emission limits contained in this permit. The test shall be conducted and reported and data reduced as set forth in 9VAC5-50-30. The details of the tests shall be arranged with the Blue Ridge Regional Office.

(9VAC5-80-110 E & K)

39. **Fuel Burning Equipment Requirements – (PWR05) – Testing** - Upon request and proper notification by the DEQ, the permittee shall conduct additional performance tests for particulate matter, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> and/or VOC from the No. 5 Power Boiler to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.  
(9VAC5-80-110 E & K)
40. **Fuel Burning Equipment Requirements – (PWR05) – Testing** - Upon request by the VDEQ, the permittee shall conduct performance tests for particulate matter, PM<sub>10</sub>, nitrogen oxides, and/or sulfur dioxide from the No. 5 Power Boiler to demonstrate compliance with the emission limits contained in the 10/05/12 Permit Document. Also upon request, the permittee shall perform additional modeling to demonstrate compliance with 40 CFR Part 51, Subpart P or other federal requirements related to visibility impairment. The details of the tests shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office.  
(9VAC5-80-110 and Condition 10 of 10/05/12 Permit Document)
41. **Fuel Burning Equipment Requirements – (PWR06) – Testing** - Upon request and proper notification by the DEQ, the permittee shall conduct performance tests for particulate matter, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, VOC and/or formaldehyde from the Power Boiler No. 6 to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.  
(9VAC5-80-110 E & K)
42. **Fuel Burning Equipment Requirements – (PWR07) – Testing** - Performance evaluations of the continuous monitoring system shall be conducted in accordance with 40 CFR Part 60, Appendix B, and shall take place during the performance tests under 9VAC5-50-30 or within 30 days thereafter. One copy of the performance evaluations report shall be submitted to the Blue Ridge Regional Office within 60 days of the evaluation. The continuous monitoring system shall be installed and operational prior to conducting initial performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation and calibration of the device. A 30 day notification, prior to the demonstration of continuous monitoring system's performance, and subsequent notifications shall be submitted to the Blue Ridge Regional Office.  
(9VAC5-80-110 and Condition 10 of 12/06/10 Permit Document)
43. **Fuel Burning Equipment Requirements – (PWR07) – Testing** - Upon request and proper notification by the DEQ, the permittee shall conduct performance tests for PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> and/or Sulfuric Acid Mist to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.  
(9VAC5-80-110 E & K)

## Reporting

44. **Fuel Burning Equipment Requirements – (PWR05) – Reporting** - The permittee shall submit a written report of excess emissions (opacity) from stacks (E26 and E27) to the Blue Ridge Regional Office semiannually. All semiannual reports shall be postmarked by the 30th day following the end of each calendar semiannual period and shall include the information specified in 9VAC5-40-50 C. The permittee shall submit written reports in accordance with General Condition 222.  
(9VAC5-80-110)
45. **Fuel Burning Equipment Requirements – (PWR05) – Reporting** - The permittee shall submit a written report of excess emissions as measured by the carbon monoxide CEMS required in Condition 24.b. The report shall be submitted in accordance with the requirements outlined in Conditions 80(a) and 81(c).  
(9VAC5-80-110)
46. **Fuel Burning Equipment Requirements – (PWR06) – Reporting** - The permittee shall submit a report of monitored emissions and monitor performance quarterly or as specified by 9VAC5-50-50 C commencing at the time of completion of the performance evaluation. The reports are to be submitted, postmarked no later than 30 calendar days after the end of the quarter or specified reporting period, to the Air Compliance Manager, Blue Ridge Regional Office. The details and format of the report are to be arranged with the Air Compliance Manager, Blue Ridge Regional Office prior to the submission of the first report.  
(9VAC5-80-110 and Condition 11 of 04/30/12 Permit Document)
47. **Fuel Burning Equipment Requirements – (PWR07) – Reporting** - The permittee shall furnish written reports to the Blue Ridge Regional Office of excess emissions from any process monitored by a continuous monitoring system on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:
- a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;
  - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;
  - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments;
  - d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report; and

e. Any other information required to comply with 40 CFR Part 60.

(9VAC5-80-110 and Condition 12 of 12/06/10 Permit Document)

48. **Fuel Burning Equipment Requirements – (PWR06 & PWR07) – Reporting** - The owner or operator of any affected facility in any category listed in 40 CFR 60.49b(h)(2) is required to submit excess emission reports for any excess emissions that occurred during the reporting period.
- a. The permittee shall submit reports containing the information recorded under 40 CFR 60.49b(g)).
  - b. The permittee may submit electronic quarterly reports for NO<sub>x</sub> in lieu of the written reports required under 40 CFR 60.49b(h) or 40 CFR 60.49b(i).
    - i. The format of each quarterly electronic report shall be coordinated with the Air Compliance Manager, Blue Ridge Regional Office. The electronic report(s) shall be submitted no later than 30 days after the end of each calendar quarter and shall be accompanied by a certification statement in accordance with 40 CFR 60.49b(v)).

(9VAC5-80-110, 40 CFR 60.49b(h), 40 CFR 60.49b(i) and 40 CFR 60.49b(v))

## **MACT Subpart DDDDD – Industrial, Commercial, and Institutional Boilers and Process Heaters (PWR05, PWR06 & PWR07)**

### **Emission Limitations and Work Practice Standards**

49. **MACT Subpart DDDDD – (PWR05) – Limitations** - The permittee shall meet each emission limit in Items 1 and 13 in Table 2 to Subpart DDDDD of Part 63. These standards apply at all times the affected unit is operating, except for periods of startup and shutdown during which time the permittee must comply only with Items 5 and 6 in Table 3 of Subpart DDDDD of Part 63.  
(9VAC5-80-110 and 40 CFR 63.7500(a) and (f))
50. **MACT Subpart DDDDD – (PWR05) - Limitations** - The permittee shall meet each operating limit in Table 4 to Subpart DDDDD of Part 63 that applies to the boiler. If the permittee uses a control device or combination of control devices not covered in Table 4 to Subpart DDDDD of Part 63, or wishes to establish and monitor an alternative operating limit or an alternative monitoring parameter, the permittee must apply to the EPA Administrator for approval of alternative monitoring under 40 CFR 63.8(f).
- a. The permittee shall meet these requirements at all times the affected unit is operating, except as provided in 40 CFR 63.7500(f).



(9VAC5-80-110 and 40 CFR 63.7500(a))

51. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) - Limitations** - The permittee shall at all times, operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.  
(9VAC5-80-110 and 40 CFR 63.7500(a))

### **General Compliance Requirements**

52. **MACT Subpart DDDDD – (PWR07) - General Compliance Requirements** – The permittee shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63, Subpart DDDDD as listed in Conditions 49 through 88 by the applicable compliance date specified in 40 CFR 63.7495(a).  
(9VAC5-80-110 and 40 CFR 63.7495)
53. **MACT Subpart DDDDD – (PWR05 & PWR06) - General Compliance Requirements** - The permittee shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63, Subpart DDDDD as listed in Conditions 49 thru 88 by the applicable compliance date specified in 40 CFR 63.7495(b).  
(9VAC5-80-110 and 40 CFR 63.7495)
54. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) - General Compliance Requirements** - The permittee shall comply with the emission limits, work practice standards, and operating limits in 40 CFR 63 Subpart DDDDD. These limits apply to the permittee at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f).  
(9VAC5-80-110 and 40 CFR 63.7505(a))
55. **MACT Subpart DDDDD – (PWR05 ) - General Compliance Requirements** - The permittee shall demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS), including a continuous emission monitoring system (CEMS), or particulate matter continuous parameter monitoring system (PM CPMS), where applicable. The permittee may demonstrate compliance with the applicable emission limit for hydrogen chloride (HCl), mercury, or total selected metals (TSM) using fuel analysis if the emission rate calculated according to 40 CFR 63.7530(c) is less than the applicable emission limit.

Otherwise, the permittee shall demonstrate compliance for HCl, mercury, or TSM using performance stack testing.  
(9VAC5-80-110 and 40 CFR 63.7505(c))

56. **MACT Subpart DDDDD – (PWR05) - General Compliance Requirements** - Should the permittee demonstrate compliance with any applicable emission limit through performance testing and subsequent compliance with operating limits through the use of CPMS, or with a CEMS or COMS, the permittee shall develop a site-specific monitoring plan according to the requirements in 40 CFR 63.7505(d)(1)-(4) for the use of any CEMS, COMS or CPMS. This requirement also applies should the permittee petition the EPA Administrator for alternative monitoring parameters under 40 CFR 63. 8(f).  
(9VAC5-80-110 and 40 CFR 63.7505(d))
57. **MACT Subpart DDDDD – (PWR05) - General Compliance Requirements** - Should the permittee choose to comply using definition (2) of “startup” in 40 CFR 63.7575, the permittee shall develop and implement a written startup and shutdown plan (SSP) according to the requirements in Table 3 to Subpart DDDDD of Part 63.
- a. The SSP shall be maintained onsite and available upon request for public inspection.  
(9VAC5-80-110 and 40 CFR 63.7505(e))
58. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) - General Compliance Requirements** - The permittee shall comply with the applicable General Provisions as specified in Table 10 to Subpart DDDDD of Part 63.  
(9VAC5-80-110 and 40 CFR 63.7565)

#### **Testing and Initial Compliance Requirements**

59. **MACT Subpart DDDDD – (PWR05) – Initial Compliance Requirements** – Should the permittee elect to demonstrate compliance with any of the applicable emission limits in Table 2 of Subpart DDDDD of Part 63 through performance (stack) testing, the initial compliance requirements shall include all the following:
- a. Conduct performance tests according to §63.7520 and Table 5 to Subpart DDDDD of Part 63.
- b. Establish operating limits according to §63.7530 and Table 7 to Subpart DDDDD of Part 63.
- c. Conduct CMS performance evaluations according to §63.7525.
- (9VAC5-80-110 and 40 CFR 63.7510(a))

60. **MACT Subpart DDDDD – (PWR05) – Initial Compliance Requirements** – The permittee shall conduct a performance test for CO according to Table 5 to Subpart DDDDD of Part 63 or conduct a performance evaluation of the continuous CO monitor, if applicable, according to 40 CFR 63.7525(a).

- a. Boilers that use a CO CEMS to comply with the applicable alternative CO CEMS emission standard listed in Table 2 to Subpart DDDDD of Part 63, as specified in 40 CFR 63.7525(a), are exempt from the initial CO performance testing and oxygen concentration operating limit requirements specified in 40 CFR 63.7525(a).

(9VAC5-80-110 and 40 CFR 63.7510(c))

61. **MACT Subpart DDDDD – (PWR05) – Initial Compliance Requirements** – The permittee shall conduct a performance test in accordance with 40 CFR 63.7520 and Table 5 to Subpart DDDDD of Part 63, to demonstrate initial compliance for PM (filterable particulate matter).

(9VAC5-80-110 and 40 CFR 63.7510(d))

62. **MACT Subpart DDDDD – (PWR05 & PWR06) – Initial Compliance Requirements** – For existing affected sources (as defined in 40 CFR 63.7490), the permittee shall complete the initial compliance demonstrations as specified in 40 CFR 63.7510(a)-(d), no later than 180 days after the compliance date that is specified for the source in 40 CFR 63.7495 and according to the applicable provisions in 40 CFR 63.7(a)(2) as cited in Table 10 to Subpart DDDDD of Part 63, except as specified in 40 CFR 63.7510(j).

- a. The permittee shall complete an initial tune-up by following the procedures described in 40 CFR 63.7540(a)(10)(i) through (vi) no later than the compliance date specified in 40 CFR 63.7495, except as specified in 40 CFR 63.7510(j).
- b. The permittee shall complete the one-time energy assessment specified in Table 3 to Subpart DDDDD of Part 63 no later than the compliance date specified in 40 CFR 63.7495.

(9VAC5-80-110 and 40 CFR 7510(e))

63. **MACT Subpart DDDDD – (PWR07) - Initial Compliance Requirements** – For new affected sources (as defined in 40 CFR 63.7490), the permittee shall demonstrate initial compliance with the applicable work practice standards in Table 3 to Subpart DDDDD of Part 63 within the applicable 5-year schedule as specified in 40 CFR 63.7515(d) following the initial compliance date specified in 40 CFR 63.7495(a). Thereafter, the permittee is required to complete the applicable 5-year tune-up as specified in 40 CFR 63.7515(d).  
(9VAC5-80-1180 and 40 CFR 63.7510(g))

64. **MACT Subpart DDDDD – (PWR05) - Initial Compliance Requirements** – The permittee shall conduct all applicable performance tests according to 40 CFR 63.7520 on an

annual basis, except as specified in paragraphs (a) and (b) below. Annual performance tests must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (a) and (b) below:

- a. If the permittee's performance tests for a given pollutant for at least 2 consecutive years shows that the permittee's emissions are at or below 75 percent of the emission limit for the pollutant, and if there are no changes in the operation of the individual boiler or air pollution control equipment that could increase emissions, the permittee may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. The requirement to test at maximum chloride input level is waived unless the stack test is conducted for HCl. The requirement to test at maximum mercury input level is waived unless the stack test is conducted for mercury.
- b. If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit for a pollutant, the permittee shall conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit, as specified in Tables 1 and 2 of Subpart DDDDD of Part 63).

(9VAC5-80-110 and 40 CFR 63.7515(a), (b) and (c))

65. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) – Initial Compliance Requirements** – The permittee shall conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12). Each 5-year tune-up specified 40 CFR 63.7540(a)(12) must be no more than 61 months after the previous tune-up. For a new affected source, the first 5-year tune-up shall be conducted no later than 61 months after April 1, 2013 or the initial startup of the affected source, whichever is later.  
(9VAC5-80-1180 and 40 CFR 63.7515(d))

66. **MACT Subpart DDDDD – (PWR05) - Initial Compliance Requirements** - The permittee shall report the results of performance tests within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to 40 CFR 63.7530 and Table 7 to Subpart DDDDD of Part 63, as applicable.

- a. The reports for all subsequent performance tests must include all applicable information required in 40 CFR 63.7550.

(9VAC5-80-110 and 40 CFR 63.7515(f))

67. **MACT Subpart DDDDD – (PWR05) - Initial Compliance Requirements** - The permittee shall conduct all performance tests according to 40 CFR 63.7(c), (d), (f), and (h). The permittee shall also develop a site-specific stack test plan according to the requirements

in §63.7(c) and conduct all performance tests according to the requirements in 40 CFR 63.7520(a), (b), (c), (d), (e) and (f).

(9VAC5-80-110 and 40 CFR 63.7520(a), (b), (c), (d), (e) and (f))

68. **MACT Subpart DDDDD – (PWR05) - Initial Compliance Requirements** - If the boiler is subject to a CO emission limit in Table 2 to Subpart DDDD of Part 63, the permittee must install, operate, and maintain an oxygen analyzer system, as defined in 40 CFR 63.7575, or install, certify, operate and maintain continuous emission monitoring systems for CO and oxygen (or carbon dioxide (CO<sub>2</sub>)) according to the procedures in (a)(1) through (6) of 40 CFR 63.7525.

(9VAC5-80-1180 and 40 CFR 63.7525(a))

69. **MACT Subpart DDDDD – (PWR05) - Initial Compliance Requirements** - If the permittee has an applicable opacity operating limit in 40 CFR 63 Subpart DDDDD, and are not otherwise required or elect to install and operate a PM CPMS, PM CEMS, or a bag leak detection system, the permittee must install, operate, certify and maintain each COMS according to the procedures in 40 CFR 63.7525(c)(1) through (7) by the compliance date specified in 40 CFR 63.7495.

(9VAC5-80-1180 and 40 CFR 63.7525(c))

70. **MACT Subpart DDDDD – (PWR05) - Initial Compliance Requirements** - The permittee shall demonstrate initial compliance with each emission limit that applies to the permittee by conducting initial performance tests and establishing operating limits, as applicable according to 40 CFR 63.7520, 40 CFR 63.7530(b) and Table 5 to Subpart DDDDD of Part 63.

- a. The requirement to conduct a fuel analysis is not applicable for units that burn a single type of fuel, as specified in 40 CFR 63.7510(a)(2).
- b. If applicable, the permittee must install, operate and maintain all applicable CMS (including CEMS, COMS and CPMS) according to 40 CFR 63.7525.

(9VAC5-80-110 and 40 CFR 63.7530(a))

71. **MACT Subpart DDDDD – (PWR05 & PWR06) - Initial Compliance Requirements** - The permittee shall include with the Notification of Compliance a signed certification that either the energy assessment was completed according to Table 3 to Subpart DDDDD of Part 63, and that the assessment is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

- a. The permittee shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e).

(9VAC5-80-110 and 40 CFR 63.7530(e) and (f))

72. **MACT Subpart DDDDD – (PWR05) - Initial Compliance Requirements** - If the permittee owns or operates a unit subject to emission limits in Table 2 to Subpart DDDDD of Part 63, the permittee shall meet the work practice standard according to Table 3 to Subpart DDDDD of Part 63. During startup and shutdown, the permittee shall only follow the work practice standards according to Items 5 and 6 of Table 3 to Subpart DDDDD of Part 63.

(9VAC5-80-110 and 40 CFR 63.7530(h))

#### **Continuous Compliance Requirements**

73. **MACT Subpart DDDDD – (PWR05) - Continuous Compliance Requirements** - The permittee shall monitor and collect data according to 40 CFR 63.7535(a), (b), (c) and (d) and the site specific monitoring plan required by 40 CFR 63.7505(d).

(9VAC5-80-110 and 40 CFR 63.7535(a), (b), (c) and (d))

74. **MACT Subpart DDDDD – (PWR05) - Continuous Compliance Requirements** - The permittee shall demonstrate continuous compliance with each emission limit in Table 2 to Subpart DDDDD of Part 63, the work practice standards in Table 3 to Subpart DDDDD of Part 63, and the operating limits in Table 4 to Subpart DDDDD of Part 63 that applies to the permittee according to the methods specified in Table 8 to Subpart DDDDD of Part 63 and 40 CFR 63.7540 (a)(1)-(19), as applicable.

(9VAC5-80-110 and 40 CFR 63.7540(a))

75. **MACT Subpart DDDDD – (PWR05) - Continuous Compliance Requirements** - To demonstrate compliance with the applicable CO CEMS emission limit in Table 2 to Subpart DDDDD of Part 63, the permittee shall meet the requirements in 40 CFR 63.7540(a)(8)(i) through (iv).

(9VAC5-80-110 and 40 CFR 63.7540(a))

76. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) - Continuous Compliance Requirements** - The permittee shall conduct a tune-up of the boiler every five years as specified in 40 CFR 63.7540(a)(10)(i) –(vi) to demonstrate continuous compliance.

a. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every five years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.

i. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

(9VAC5-80-110 and 40 CFR 63.7540(a))

77. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) - Continuous Compliance Requirements** The permittee shall report each instance in which the facility did not meet each emission limit and operating limit in Tables 2 through 4 of Subpart DDDDD of Part 63 that apply to the permittee. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR 63 Subpart DDDDD. These deviations must be reported according to the requirements in 40 CFR 63.7550.  
(9VAC5-80-110 and 40 CFR 63.7540(b))
78. **MACT Subpart DDDDD – (PWR05) - Continuous Compliance Requirements** For startup and shutdown, the permittee shall meet the work practice standards according to Items 5 and 6 of Table 3 to Subpart DDDDD of Part 63.  
(9VAC5-80-110 and 40 CFR 63.7540(d))

### **Notifications, Reports and Recordkeeping**

79. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) – Notifications** - The permittee shall submit the following notifications:
- a. All of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6) and 63.9(b) through (h) that apply to the permitted facility by the dates specified.
  - b. As specified in 40 CFR 63.9(b)(2), if the permittee starts up the affected source before January 31, 2013, the permittee shall submit an Initial Notification not later than 120 days after January 31, 2013.
  - c. As specified in 40 CFR 63.9(b)(4) and (5), if the permittee starts up the new or reconstructed affected source on or after January 31, 2013, the permittee shall submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.
  - d. For each initial compliance demonstration as specified in §63.7530, the permittee shall submit a Notification of Compliance according to §63.9(h)(2)(ii). For the initial demonstration for each boiler or process heater, the permittee shall submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60<sup>th</sup> day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2).
    - i. The Notification of Compliance Status Report shall contain all the information specified in paragraphs 40 CFR 63.7545(e)(1)-(8), as applicable.
    - ii. If the permittee is not required to conduct an initial compliance demonstration as specified in 40 CFR 63.7520(a), the Notification of Compliance Status shall only contain the information specified in 40 CFR 63.7520 (e)(1) and (8) and shall be submitted within 60 days of the compliance date specified at 40 CFR 63.7495(b).

- e. If the permittee is required to conduct a performance test, the permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin.

(9VAC5-80-110 and 40 CFR 63.7545 (a), (b), (c), (d) and (e))

80. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) - Reporting** - The permittee shall submit the following reports:

- a. Each report in Table 9 to Subpart DDDDD of Part 63 that applies to the permitted facility. The permittee must submit each report, according to 40 CFR 63.7550(h), by the date in Table 9 to Subpart DDDDD of Part 63 and according to the requirements in 40 CFR 63.7550(b)(1)-(4).
- b. For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to 40 CFR 63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or operating limits specified in Table 4 to Subpart DDDDD of Part 63, the permittee shall submit only an annual, biennial, or 5-year compliance report, as applicable as specified in 40 CFR 63.7550(b)(1)-(4).

(9VAC5-80-110 and 40 CFR 63.7550(a) and (b))

81. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) - Reporting** - The compliance report shall contain the following information depending on how the facility chooses to comply with the limits set in 40 CFR 63 Subpart DDDDD:

- a. If the facility is subject to the requirements of a tune-up, the permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv) and (xvii).
- b. If the permittee is complying with the applicable emissions limit with performance testing the permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (vi), (vii), (viii), (ix), (xi), (xiii), (xv), (xviii), and 40 CFR 63.7550(d).
- c. If the permittee is complying with an emissions limit using a CMS the compliance report must contain the information in 40 CFR 63.7550(c)(5)(i) through (iii), (v), (vi), (xi) through (xiii), (xv) through (xviii) and 40 CFR 63.7550(e).
- d. For each deviation from an emission or operating limit in 40 CFR 63 Subpart DDDDD that occurs at an individual boiler where the permittee is not using a CMS to comply with that emission limit or operating limit, or from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the information required in 40 CFR 63.7550(d)(1) through (3).



- e. For each deviation from an emission limit, operating limit and monitoring requirement in 40 CFR 63 Subpart DDDDD occurring at an individual boiler where the permittee is using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information in 40 CFR 63.7550(e)(1) through (9). This includes any deviations from the facility's site-specific monitoring plan as required in 40 CFR 63.7505(d).

(9VAC5-80-110 and 40 CFR 63.7550(c), (d) and (e))

82. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) - Reporting** - The permittee shall submit the reports according to the procedures specified in 40 CFR 63.7550(h)(1)-(3).

- a. The reports referenced above shall also be submitted to the attention of the Air Compliance Manager, Blue Ridge Regional Office.

(9VAC5-80-110 and 40 CFR 63.7550(h))

83. **MACT Subpart DDDDD – (PWR05, PWR06 & PWR07) – Recordkeeping** - The permittee shall keep records according to 40 CFR 63.7555(a)(1) and (2). These records shall include:

- a. A copy of each notification and report that the permittee submitted to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
- b. Records of performance tests or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).

(9VAC5-80-110 and 40 CFR 63.7555(a))

84. **MACT Subpart DDDDD – (PWR05) – Recordkeeping** - For each CEMS, COMS and continuous monitoring system, the permittee shall keep records according to 40 CFR 63.7555(b)(1)-(5).

(9VAC5-80-110 and 40 CFR 63.7555(b))

85. **MACT Subpart DDDDD – (PWR05) – Recordkeeping** - The permittee shall keep the applicable records required in Table 8 to Subpart DDDDD of Part 63 including records of all monitoring data and calculated averages for applicable operating limits, such as opacity and operating load, to show continuous compliance with each emission limit and operating limit that applies to the permitted facility.

(9VAC5-80-110 and 40 CFR 63.7555(c))

86. **MACT Subpart DDDDD – (PWR05) – Recordkeeping** - For each boiler subject to an emission limit in Table 2 to Subpart DDDDD of Part 63, the permittee must also keep the applicable records specified in 40 CFR 63.7555(d)(1) through (11).  
(9VAC5-80-110 and 40 CFR 63.7555(d))
87. **MACT Subpart DDDDD – (PWR05) – Recordkeeping** - For each startup period, for units selecting paragraph (2) of the definition of “startup” in 40 CFR 63.7575 the permittee must maintain records of the time that clean fuel combustion begins; the time when the permittee starts feeding fuels that are not clean fuels; the time when useful thermal energy is first supplied; and the time when the PM controls are engaged.
- a. If the permittee chooses to rely on paragraph (2) of the definition of “startup” in 40 CFR 63.7575, for each startup period, the permittee must maintain records of the hourly steam temperature, hourly steam pressure, hourly steam flow, hourly flue gas temperature, and all hourly average CMS data (*e.g.*, CEMS, PM CPMS, COMS, ESP total secondary electric power input, scrubber pressure drop, scrubber liquid flow rate) collected during each startup period to confirm that the control devices are engaged. In addition, if compliance with the PM emission limit is demonstrated using a PM control device, you must maintain records as specified in 40 CFR 63.7555(d)(12)(i) through (iii).
- i. If the permittee chooses to use paragraph (2) of the definition of “startup” in 40 CFR 63.7575 and the permittee finds that the facility is unable to safely engage and operate the PM control(s) within 1 hour of first firing of non-clean fuels, the permittee may choose to rely on paragraph (1) of definition of “startup” in 40 CFR 63.7575 or you may submit to the delegated permitting authority a request for a variance with the PM controls requirement as described in 40 CFR 63.7555(d)(13)(i)-(iv).
- (9VAC5-80-110 and 40 CFR 63.7555(d))
88. **MACT Subpart DDDDD – (PWR05, PWR06, PWR07) – Recordkeeping** - The permittee’s records shall be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).
- a. As specified in §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- b. The permittee must keep each record on site, or they must be accessible from on site, for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The permittee can keep the records off site for the remaining 3 years.

(9VAC5-80-110 and 40 CFR 63.7560(a), (b) and (c))

## **Fuel Burning Equipment Requirements – Engines (ENG02, ENG03, ENG04 & ENG05)**

### **Limitations**

89. **Fuel Burning Equipment Requirements – (ENG02, ENG03, ENG04 & ENG05) – Limitations** - Visible emissions from the emergency engine (ENG02, ENG03, ENG04, ENG05) stacks shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity. The opacity standards for the engines apply at all times except during periods of startup, shutdown and malfunction  
(9VAC5-80-110, 9VAC5-50-20 and 9VAC5-50-80)

## **MACT Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines – (ENG02, ENG03, ENG04 & ENG05)**

### **General Compliance Requirements**

90. **MACT Subpart ZZZZ – (ENG02 & ENG03) - General Compliance Requirements** - The permittee must be in compliance with the emission limitations, operating limitations and other requirements in Subpart ZZZZ that apply to the source at all times. At all times the permittee shall operate and maintain the affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records and inspection of the source.  
(9VAC5-80-110 and 40 CFR 63.6605)
91. **MACT Subpart ZZZZ – (ENG04 & ENG05) - General Compliance Requirements** - For the emergency engines (ENG04, ENG05), the permittee shall comply with 40 CFR 63 Subpart ZZZZ by complying with the applicable requirements of 40 CFR 60 Subpart JJJJ. No other requirements of Subpart ZZZZ apply to engines ENG04 and ENG05.  
(9VAC5-80-110 and 40 CFR 63.6590(c))

### **Emission and Operating Limitations**

92. **MACT Subpart ZZZZ – (ENG02) - Limitations** - The permittee must comply with the emission limitations and other requirements in item 1 of Table 2c to Subpart ZZZZ of Part 63.  
(9VAC5-80-110, 40 CFR 63.6602 and Table 2c to Subpart ZZZZ)

93. **MACT Subpart ZZZZ – (ENG03) – Limitations** - The permittee must comply with the emission limitations and other requirements in item 6 of Table 2c to Subpart ZZZZ of Part 63.  
(9VAC5-80-110, 40 CFR 63.6602 and Table 2c to Subpart ZZZZ)

#### **Initial Compliance Requirements**

94. **MACT Subpart ZZZZ – (ENG02 & ENG03) - Operation & Maintenance** - The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop its own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.  
(9VAC5-80-110 and 40 CFR 63.6625(e))
95. **MACT Subpart ZZZZ - (ENG02 & ENG03) - Operation & Maintenance** - The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.  
(9VAC5-80-110 and 40 CFR 63.6625(h))
96. **MACT Subpart ZZZZ – (ENG02) - Operation & Maintenance** - The permittee may utilize an oil analysis program as described in 40 CFR 63.6625(i) to extend the specified oil change requirement in item 1 of Table 2(c) to Subpart ZZZZ of Part 63. If an oil analysis program is utilized, the analysis program must be part of the maintenance plan for the engine.  
(9VAC5-80-110 and 40 CFR 63.6625(i))
97. **MACT Subpart ZZZZ – (ENG03) - Operation & Maintenance** - The permittee may utilize an oil analysis program as described in 40 CFR 63.6625(j) to extend the specified oil change requirement in item 6 of Table 2(c) to Subpart ZZZZ of Part 63. If an oil analysis program is utilized, the analysis program must be part of the maintenance plan for the engine.  
(9VAC5-80-110 and 40 CFR 63.6625(j))

#### **Monitoring**

98. **MACT Subpart ZZZZ - (ENG02 & ENG03) – Monitoring** - The permittee shall install a non-resettable hour meter on the existing emergency stationary RICE if one is not already installed.  
(9VAC5-80-110 and 40 CFR 63.6625(f))

#### **Continuous Compliance Requirements**

99. **MACT Subpart ZZZZ – (ENG02 & ENG03) - Continuous Compliance Requirements**  
- The permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2c to Subpart ZZZZ of Part 63 that apply to the source according to the methods specified in Table 6 to Subpart ZZZZ of Part 63.  
(9VAC5-80-110 and 40 CFR 63.6640(a))
100. **MACT Subpart ZZZZ - (ENG02 & ENG03) - Continuous Compliance Requirements**  
- The permittee must comply with the applicable requirements in Table 8 to Subpart ZZZZ of Part 63.  
(9VAC5-80-110 and 40 CFR 63.6665)
101. **MACT Subpart ZZZZ - (ENG02 & ENG03) - Continuous Compliance Requirements**  
- In order for the engines to be considered an emergency stationary RICE under Subpart ZZZZ, any operation other than those listed in 40 CFR 63.6640(f) is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 63.6640(f), the engine will not be considered an emergency engine under Subpart ZZZZ and shall meet all requirements for non-emergency engines.  
(9VAC5-80-110 and 40 CFR 63.6640(f))

#### **Notifications, Reports and Recordkeeping**

102. **MACT Subpart ZZZZ - (ENG02 & ENG03) - Reporting** - The permittee must report each instance in which the source did not meet an applicable operating limitation in Table 2c to Subpart ZZZZ of Part 63, and any applicable requirement included in Table 8 to Subpart ZZZZ of Part 63. The permittee shall report all deviations in the semiannual monitoring reports as outlined in Condition 229.  
(9VAC5-80-110, 40 CFR 63.6640(b) and (e), and 40 CFR 63.6650(f))
103. **MACT Subpart ZZZZ - (ENG02 & ENG03) – Recordkeeping** - The permittee must keep the following records:
- a. A copy of each notification and report that the permittee submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in §63.10(b)(2)(xiv).
  - b. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
  - c. Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - d. Records of all actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning

process and air pollution control and monitoring equipment to its normal or usual manner of operation.

- e. Records required in Table 6 to Subpart ZZZZ to Part 63 to show continuous compliance with each emission or operating limitation that applies to the permittee.
- f. Records of the maintenance conducted on the stationary RICE in order to demonstrate that the source operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee's maintenance plan.
- g. If the oil analysis program described in Condition 96 or 97 is implemented, the permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis and the oil changes for the engines.
- h. If the emergency stationary RICE does not meet the standards in Subpart ZZZZ to Part 63 applicable to non-emergency engines, the permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The documentation shall include the information specified in 40 CFR 63.6655(f).

(9VAC5-80-110, 40 CFR 63.6625(i) and 40 CFR 63.6655(a), (d), (e) and (f))

**104. MACT Subpart ZZZZ - (ENG02 & ENG03) – Recordkeeping** - The permittee's records shall be in a form suitable and readily available for expeditious review, according to §63.10(b)(1).

- a. As specified in §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- b. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action report, or record, according to §63.10(b)(1).

(9VAC5-80-110 and 40 CFR 63.6660)

## **NSPS Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – (ENG04 & ENG05)**

### **General Compliance Requirements**

**105. NSPS Subpart JJJJ - (ENG04 & ENG05)** - The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A as listed in 40 CFR 60 Subpart JJJJ Table 3.

(9VAC5-80-110 and 40 CFR 60.4246)

## **Emission Standards and Other Requirements**

106. **NSPS Subpart JJJJ - (ENG04 & ENG05)** - The emergency engines shall comply with the emission limitations of 40 CFR 60 Subpart JJJJ Table 1 for the entire life of the engine. (9VAC5-80-110, 40 CFR 60.4233(d), (e), and 40 CFR 60.4234)
107. **NSPS Subpart JJJJ - (ENG04 & ENG05)** - If the emergency stationary SI internal combustion engines do not meet the standards applicable to non-emergency engines, the permittee shall install a non-resettable hour meter on each engine. (9VAC5-80-110 and 40 CFR 60.4237(c))

## **Compliance Requirements**

108. **NSPS Subpart JJJJ - (ENG04 & ENG05)** - The permittee shall comply with Condition 106 in accordance with 40 CFR 60.4243(b)(1) and (d). Operation for non-emergency purposes may require a permit to modify and operate pursuant to 9VAC5-80 Article 6. (9VAC5-80-110 and 40 CFR 60.4243)

## **Reports and Records**

109. **NSPS Subpart JJJJ - (ENG04 & ENG05)** - The permittee shall maintain records and submit reports as required in 40 CFR 60.4245(a), (b), and (e). The reports shall also be submitted to the attention of the Air Compliance Manager, Blue Ridge Regional Office. (9VAC5-80-110 and 40 CFR 60.4245)

## **Process Equipment Requirements – Pulp Mill (PULP02, PULP03 & PULP04)**

### **Limitations**

110. **Process Equipment Requirements – (PULP03) – Limitations** - The throughput of semi-chemical virgin pulp through the pulp washer (PULP03) shall not exceed 864 oven dry tons per day, calculated daily as the average of each consecutive 30-day period. Compliance for the consecutive 30-day period shall be demonstrated daily by adding the total for the most recently completed day to the total for the preceding 29 calendar days. (9VAC5-80-110 and Condition 12 of 02/04/21 Permit Document)
111. **Process Equipment Requirements – (PULP02, PULP03, PULP04) – Limitations** - Visible emissions from all Pulp Mill Equipment, except the new Blow Tank portion of the Digester System (PULP02), shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity. (9VAC5-80-110 and 9VAC5-40-80)
112. **Process Equipment Requirements – (PULP02) – Limitations** - Visible emissions from the new Blow Tank shall not exceed 20% opacity except during one six-minute period in

any one hour in which visible emissions shall not exceed 30% opacity.  
(9VAC5-80-110 and 9VAC5-50-80)

## **Monitoring**

**113. Process Equipment Requirements – (PULP02, PULP03, PULP04) – Monitoring -** At least one time per calendar week, an observation for the presence of visible emissions from the Pulp Mill Equipment shall be made. If visible emissions are observed, the permittee shall:

- a. take timely corrective action such that the affected equipment resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on the affected equipment in accordance with 40 CFR 60, Appendix A, Method 9 for a minimum of six minutes to assure visible emissions from the equipment does not exceed 20 percent opacity. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observations have been completed. Timely corrective action shall be taken, if necessary, such that the affected equipment resumes operation within the 20 percent opacity limit.
- c. If visible emissions observations conducted for a particular source during twelve consecutive weeks show no visible emissions, the permittee with DEQ concurrence, may reduce the monitoring frequency to once per calendar month for that source. Any time the monthly visible emissions inspections show observable opacity, or when requested by DEQ, the monitoring frequency shall be increased to once per week.

The permittee shall maintain an observation log to demonstrate compliance with this condition. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action and the name of the observer. If the Pulp Mill Equipment (PULP02, PULP03, PULP04) has not been operated for any period during the entire week, it shall be noted in the log book.  
(9VAC5-80-110 E & K)

## **Recordkeeping**

**114. Process Equipment Requirements – (PULP02, PULP03, PULP04) – Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. The throughput of semi-chemical virgin pulp through the pulp washer (PULP03) calculated daily as the average of each consecutive 30-day period.



- b. Visual emission observation logs required by Condition 113.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 E & K and Condition 22.e. of 02/04/21 Permit Document)

## **MACT Subpart S – Pulp & Paper Industry (PULP02, REC04 & REC12)**

### **General Compliance Requirements**

#### **115. MACT Subpart S – (PULP02, REC04, REC12) – General Compliance Requirements -**

The permittee shall comply with the applicable General Provisions as specified in Table 1 to Subpart S of Part 63.

(9VAC5-80-110 and 40 CFR 63.440)

#### **116. MACT Subpart S – (PULP02, REC04, REC12) - General Compliance Requirements -**

For the purposes of this section of this permit, all terms used herein shall have the meaning given them in 40 CFR 63 Subpart A and 40 CFR 63 Subpart S.

(9VAC5-80-110 and 40 CFR 63.441)

### **Standards for the Pulping System (Semi-Chemical Processes)**

#### **117. MACT Subpart S – (PULP02, REC04, REC12) – Standards for the Pulping System -**

The Low Volume, High Concentration system (LVHC) equipment systems shall be enclosed and vented into a closed-vent system and routed to a control device that meets the control requirements specified in Condition 118. The LVHC means the collection of equipment including the digester and evaporator systems, and any other equipment serving the same function as those previously listed. The enclosures and closed-vent system shall meet the design requirements specified in Condition 120.

(9VAC5-80-110, 40 CFR 63.443(b) and 40 CFR 63.443(c))

#### **118. MACT Subpart S – (PULP02, REC04, REC12) – Standards for the Pulping System -**

The control device used to reduce total HAP emissions from the LVHC system shall use one of the following:

- a. a boiler by introducing the HAP emission stream with the primary fuel or into the flame zone; or
- b. a boiler with a heat input capacity greater than or equal to 150 million British thermal units per hour by introducing the HAP emission stream with the combustion air.

(9VAC5-80-110 and 40 CFR 63.443(d))

#### **119. MACT Subpart S – (PULP02, REC04, REC12) – Standards for the Pulping System -**

Periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40

CFR 63.443(c) and (d) provided that the time of excess emissions divided by the total process operating time in a semi-annual reporting period does not exceed one percent for control devices used to reduce the total HAP emissions from the LVHC system.  
(9VAC5-80-110 and 40 CFR 63.443(e))

### **Standards for Enclosures and Closed-vent Systems**

120. **MACT Subpart S – (PULP02, REC04, REC12) - Standards for Enclosures and Closed-vent Systems** - Each enclosure and closed-vent system specified in 40 CFR 63.443(c) for capturing and transporting vent streams that contain HAP shall meet the requirements specified in 40 CFR 63.450(b)-(d).  
(9VAC5-80-110 and 40 CFR 63.450(a))

### **Monitoring Requirements**

121. **MACT Subpart S – (PULP02, REC04, REC12) – Monitoring Requirements** - Each owner or operator subject to the standards specified in 40 CFR 63.443(c) and (d), or 40 CFR 63.450(d), shall install, calibrate, certify, operate and maintain according to the manufacturer's specifications, a continuous monitoring system (CMS, as defined in 40 CFR 63.2) as specified in 40 CFR 63.453(b) through (m), except as allowed in 40 CFR 63.453(m). The CMS shall include a continuous recorder.  
(9VAC5-80-110 and 40 CFR 63.453(a))
122. **MACT Subpart S – (PULP02, REC04, REC12) - Monitoring Requirements** – Each enclosure and closed-vent system used to comply with 40 CFR 63.450(a) shall comply with the requirements specified in 40 CFR 63.453(k)(1) through (k)(6) and as follows:
- a. For each enclosure opening, a visual inspection of the closure mechanism specified in 40 CFR 63.450(b) shall be performed at least once each calendar month with no less than 14 calendar days elapsed between inspection to ensure the opening is maintained in the closed position and sealed.  
(9VAC5-80-110)
  - b. Each closed-vent system required by 40 CFR 63.450(a) shall be visually inspected at least once each calendar month with no less than 14 calendar days elapsed between inspection and at other times as requested by the Administrator. The visual inspection shall include inspection of ductwork, piping, enclosures and connections to covers for visible evidence of defects.  
(9VAC5-80-110)
  - c. For positive pressure closed-vent system or portions of closed-vent systems, demonstrate no detectable leaks as specified in 40 CFR 63.450(c) measured initially and annually by the procedures in 40 CFR 63.457(d).  
(40 CFR 63.453(k))

- d. Demonstrate initially and annually that each enclosure opening is maintained at negative pressure as specified in 40 CFR 63.457(e).  
(40 CFR 63.453(k))
- e. The valve or closure mechanism specified in 40 CFR 63.450(d)(2) shall be inspected at least once each calendar month with no less than 14 calendar days elapsed between inspection to ensure that the valve is maintained in the closed position and the emission point gas stream is not diverted through the bypass line.  
(9VAC5-80-110)
- f. If an inspection required by 40 CFR 63.453(k)(1) through (k)(5) identifies visible defects in ductwork, piping, enclosures or connections to covers as required by 40 CFR 63.450 or if an instrument reading of 500 parts per million by volume or greater above background is measured or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken as soon as practicable:
  - i. A first effort to repair or correct the closed-vent system shall be made as soon as practicable but no later than 5 calendar days after the problem is identified.
  - ii. The repair or corrective action shall be completed no later than 15 days after the problem is identified. Delay of repair or corrective action is allowed if the repair or correction action is technically infeasible without a process unit shutdown or if the owner or operator determines that the emissions resulting from immediate repair would be greater than the emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process shutdown.  
(40 CFR 63.453(k))

(9VAC5-80-110 and 40 CFR 63.453(k))

123. **MACT Subpart S – (PULP02, REC04, REC12) – Monitoring Requirements** Each owner or operator of a control device subject to the monitoring provisions of 40 CFR 63.453 shall operate the control device in a manner consistent with the minimum or maximum (as appropriate) operating parameter value or procedure required to be monitored under the applicable requirements of 40 CFR 63.453(a) through (n) and established under 40 CFR Subpart S. Except as provided in 40 CFR 63.443(e) operation of the control device below minimum operating parameter values or above maximum operating parameter values established under 40 CFR Subpart S or failure to perform procedures required by 40 CFR Subpart S shall constitute a violation of the applicable emission standard of 40 CFR Subpart S and be reported as a period of excess emissions.  
(9VAC5-80-110 and 40 CFR 63.453(o))

124. **MACT Subpart S – (PULP02, REC04, REC12) – Monitoring Requirements** - At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner

consistent with safety and good air pollution and control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but it not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records and inspection of the source.  
(9VAC5-80-110 and 40 CFR 63.453(q))

### **Recordkeeping Requirements**

125. **MACT Subpart S – (PULP02, REC04, REC12) – Recordkeeping Requirements** - The permittee shall comply with the recordkeeping requirements of 40 CFR 63.10 as shown in Table 1 to Subpart S and the applicable requirements in 40 CFR 63.454(b) through (g) for the monitoring parameters specified in 40 CFR 63.453.  
(9VAC5-80-110 and 40 CFR 63.454(a))
126. **MACT Subpart S – (PULP02, REC04, REC12) – Recordkeeping Requirements** - For each applicable enclosure opening, closed vent system and closed collection system, the permittee shall prepare and maintain a site-specific inspection plan including a drawing or schematic of the components of applicable affected equipment and shall record the information specified in 40 CFR 63.454(b)(1) through (b)(12) which includes, but is not limited to:
- a. Results of negative pressure tests for enclosures;
  - b. Results of leak detection tests.
- (9VAC5-80-110 and 40 CFR 63.454(b))
127. **MACT Subpart S – (PULP02, REC04, REC12) – Recordkeeping Requirements** - The permittee shall record the applicable CMS parameters specified in 40 CFR 63.453 and meet the requirements specified in 40 CFR 63.454(a) for any new affected process equipment that becomes subject to 40 CFR Part 63 Subpart S due to a process change or modification.  
(9VAC5-80-110 and 40 CFR 63.454(d))
128. **MACT Subpart S – (PULP02, REC04, REC12) - Recordkeeping Requirements** - The owner or operator shall set the flow indicator on each bypass line specified in 40 CFR 63.450(d)(1) to provide a record of the presence of gas stream flow in the bypass line at least once every 15 minutes.  
(9VAC5-80-110 and 40 CFR 63.454(e))
129. **MACT Subpart S – (PULP02, REC04, REC12) - Recordkeeping Requirements** - The permittee shall maintain records of malfunctions in accordance with the requirements of 40 CFR 63.454(g)(1)-(2).  
(9VAC5-80-110 and 40 CFR 63.454(g))

## Reporting Requirements

130. **MACT Subpart S – (PULP02, REC04, REC12) - Reporting Requirements** - The permittee shall comply with the reporting requirements of 40 CFR 63 Subpart A as specified in Table 1 to Subpart S of Part 63 – General Provisions Applicability to Subpart S and the applicable requirements in 40 CFR 63.455. The reports shall also be submitted to the attention of the Air Compliance Manager, Blue Ridge Regional Office. These requirements include, but are not limited to:

- a. Malfunction reporting requirements – If a malfunction occurred during the reporting period, the report must include the number, duration and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operating during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.453(q), including actions taken to correct a malfunction.

(9VAC5-80-110 and 40 CFR 63.455(a) and (g))

131. **MACT Subpart S – (PULP02, REC04, REC12) – Reporting Requirements** - The permittee shall meet the requirements specified in 40 CFR 63.455(a) upon startup of any new affected process equipment that becomes subject to the standards of 40 CFR 63 Subpart S due to a process change or modification.  
(9VAC5-80-110 and 40 CFR 455(d))

## Test Methods and Procedures

132. **MACT Subpart S – (PULP02, REC04, REC12) - Test Methods and Procedures** - To measure detectable leaks for closed-vent systems as specified in 40 CFR 63.450, the permittee shall comply with the following:

- a. Method 21, of Part 60, appendix A-7; and
- b. The instrument specified in Method 21 shall be calibrated before use according to the procedures specified in Method 21 on each day that leak checks are performed. The calibration gases shall meet the requirements specified in 40 CFR 63.457(d)(2)(i)-(ii).

(9VAC5-80-110 and 40 CFR 63.457(d))

133. **MACT Subpart S – (PULP02, REC04, REC12) - Test Methods and Procedures** - To demonstrate negative pressure at process equipment enclosure openings as specified in 40 CFR 63.450(b), the permittee shall use one of the following procedures:

- a. An anemometer to demonstrate flow into the enclosure opening;
- b. Measure the static pressure across the opening;

- c. Smoke tubes to demonstrate flow into the enclosure opening; or
- d. Any other industrial ventilation test method demonstrated to the Administrator's satisfaction.

(9VAC5-80-110 and 40 CFR 63.457(e))

134. **MACT Subpart S – (PULP02, REC04, REC12) - Test Methods and Procedures** - For purposes of complying with the requirements in 40 CFR 63.443, the permittee shall measure the total HAP concentration as one of the following:

- a. As the sum of all individual HAPs; or
- b. As methanol.

(9VAC5-80-110 and 40 CFR 63.457(f))

## **Process Equipment Requirements – Chemical Recovery (REC13 & REC14)**

### **Limitations**

135. **Process Equipment Requirements – Recovery Furnace (REC13) – Limitations** - Particulate matter from the Recovery Furnace (REC13) shall be controlled by an electrostatic precipitator (ESP). The ESP shall be provided with adequate access for inspection and shall be in operation when the Recovery Furnace is operating.  
(9VAC5-80-110 and Condition 2 of 05/01/08 Permit Document)
136. **Process Equipment Requirements - Smelt Dissolving Tank (REC14) – Limitations** - Particulate matter from the Smelt Dissolving Tank (REC14) shall be controlled by a dynamic wet scrubber. The scrubber shall be provided with adequate access for inspection and shall be in operation when the Smelt Dissolving Tank is operating.  
(9VAC5-80-110 and Condition 7 of 05/01/08 Permit Document)
137. **Process Equipment Requirements - Smelt Dissolving Tank (REC14) – Limitations** - The Smelt Dissolving Tank (REC14) shall process the smelt produced from the combustion of no more than 73,000 tons per year of Black Liquor Solids (BLS) in the Recovery Furnace (REC13). Black liquor combustion is calculated monthly of each consecutive 12-month period.  
(9VAC5-80-110 and Condition 12 of 05/01/08 Permit Document)
138. **Process Equipment Requirements - Recovery Furnace (REC13) – Limitations** - The approved fuels for the Recovery Furnace (REC13) are BLS from the semi-chemical digester system and natural gas. A change in the fuel may require a permit to modify and

operate.

(9VAC5-80-110 and Condition 13 of 05/01/08 Permit Document)

139. **Process Equipment Requirements - Recovery Furnace (REC13) – Limitations -** The Recovery Furnace (REC13) shall consume no more than 99.86 MM cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12-month period. This throughput equates to 10% annual capacity factor as defined in 40 CFR 60.41.b. for this furnace. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 14 of 05/01/08 Permit Document)

140. **Process Equipment Requirements - Recovery Furnace (REC13) – Limitations -** The Recovery Furnace (REC13) shall consume no more than 73,000 tons of BLS per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9VAC5-80-110 and Condition 15 of 05/01/08 Permit Document)

141. **Process Equipment Requirements - Recovery Furnace (REC13) – Limitations -** Emissions from the Recovery Furnace (REC13) shall be controlled by proper operation and maintenance of the combustion and emission control equipment. Furnace operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the furnace. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.

(9VAC5-80-110 and Condition 16 of 05/01/08 Permit Document)

142. **Process Equipment Requirements - Recovery Furnace (REC13) – Limitations -** Emissions from the operation of the Recovery Furnace (REC13) shall not exceed the limits specified below:

Pollutants	Emission Limits		
	Short-term emissions & units	lb/hr	tons/yr
Particulate Matter (PM) / PM <sub>10</sub>	0.015 gr/dscf @ 8% O <sub>2</sub>	-	17.1
Sulfur Dioxide	9 ppmvd @ 8% O <sub>2</sub> 0.024 lbs/MMBtu	-	11.8
Nitrogen Oxides	-	42.8	149.8
Carbon Monoxide	300 ppmvd @ 8% O <sub>2</sub>	-	175.6
Gaseous Organic	2.97 lb/ton BLS	24.7	108.4

Pollutants	Emission Limits		
	Short-term emissions & units	lb/hr	tons/yr
HAP <sup>1</sup> /VOC			
Total Reduced Sulfur (TRS)	5 ppmvd @ 8% O <sub>2</sub>	-	3.5

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 152, 138, 139 and 140.  
 (9VAC5-80-110 and Condition 18 of 05/01/08 Permit Document)

- 143. Process Equipment Requirements - Smelt Dissolving Tank (REC14) – Limitations -**  
 Emissions from the operation of the Smelt Dissolving Tank (REC14) shall not exceed the limits specified below:

Pollutants	Emission Limits		
	Short-term emissions & units	lb/hr	tons/yr
PM/PM <sub>10</sub>	0.12 lbs/ton BLS processed	1.0	4.4

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 136, 137 and 152.  
 (9VAC5-80-110 and Condition 19 of 05/01/08 Permit Document)

- 144. Process Equipment Requirements – Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Limitations -** Visible emissions from the Recovery Furnace (REC13) and Smelt Dissolving Tank (REC14) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
 (9VAC5-80-110 and Condition 20 of 05/01/08 Permit Document)

- 145. Process Equipment Requirements – Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Limitations -** Visible emissions from fugitive emission points associated with the Recovery Furnace (REC13) and Smelt Dissolving Tank (REC14) shall not exceed 10 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).  
 (9VAC5-80-110 and Condition 21 of 05/01/08 Permit Document)

- 146. Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Limitations -** At all times, including periods of start-up, shutdown

---

<sup>1</sup> Gaseous Organic HAP - measured as total hydrocarbon and reported as Carbon



and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to the Recovery Furnace (REC13) and Smelt Dissolving Tank (REC14):

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts for the emission control equipment and associated monitoring devices.
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.  
(9VAC5-80-110 and Condition 38 of 05/01/08 Permit Document)

## Monitoring

147. **Process Equipment Requirements – Recovery Furnace (REC13) - Monitoring** -The Recovery Furnace ESP shall be equipped with devices to continuously measure the secondary voltage. Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the ESP is operating. The operating condition of each field shall be observed once per 12-hour shift at a minimum. Any malfunctioning fields shall be noted and recorded. The permittee shall establish a normal operating ESP secondary voltage measurement based upon the manufacturer's recommendations, developed from observations recorded from the data acquisition system during normal operation or based upon the most recent compliance performance test. The permittee shall maintain written documentation of these measurements.  
(9VAC5-80-110 and Condition 3 of 05/01/08 Permit Document)

148. **Process Equipment Requirements – Recovery Furnace (REC13) - Monitoring** - The Recovery Furnace ESP shall be equipped with a device to continuously measure and record opacity (COMS). The COMS shall be installed, maintained, calibrated and operated in

accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The COMS shall be provided with adequate access for inspection and shall be in operation when the Recovery Furnace is operating.

(9VAC5-80-110 and Condition 4 of 05/01/08 Permit Document)

- 149. Process Equipment Requirements – Recovery Furnace (REC13) - Monitoring -** The Recovery Furnace (REC13) shall be equipped with a device to continuously measure and record NO<sub>x</sub> and O<sub>2</sub> emissions (CEMS). The CEMS shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The CEMS shall be provided with adequate access for inspection and shall be in operation when the Recovery Furnace is operating.  
(9VAC5-80-110 and Condition 5 of 05/01/08 Permit Document)
- 150. Process Equipment Requirements – Recovery Furnace (REC13) - Monitoring -** The Recovery Furnace (REC13) shall be equipped with devices to continuously monitor fuel flow (Black Liquor Solids (BLS) and natural gas) to the furnace. Fuel consumption shall be recorded daily.  
(9VAC5-80-110 and Condition 6 of 05/01/08 Permit Document)
- 151. Process Equipment Requirements - Smelt Dissolving Tank (REC14) - Monitoring -** The permittee shall install, calibrate, maintain and operate a continuous monitoring system that can be used to determine and record the scrubber fan amps and the scrubbing liquid flow rate at least once every successive 15-minute period. The permittee shall establish a normal operating scrubber liquid flow rate and fan amperage based upon the manufacturer's recommendations, developed from observations recorded from the data acquisition system during normal operation or based upon the most recent compliance performance test. The permittee shall maintain written documentation of these measurements.  
(9VAC5-80-110 and Condition 8 of 05/01/08 Permit Document)
- 152. Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) - Monitoring -** To ensure good performance, the monitoring devices shall be observed or recorded by the permittee with a frequency of not less than:
- a. Recovery Furnace COMS - continuous
  - b. ESP secondary voltage - continuous
  - c. Recovery Furnace NO<sub>x</sub> and O<sub>2</sub> CEMS – continuous
  - d. Smelt Dissolving Tank Scrubber (fan amps and flow) - once every 15 minutes with an hourly average

(9VAC5-80-110 and Condition 9 of 05/01/08 Permit Document)

**153. Process Equipment Requirements - Smelt Dissolving Tank (REC14) – Monitoring -** At least one time per calendar week, an observation of the presence of visible emissions from the Smelt Dissolving Tank (REC14) stack shall be made. If visible emissions are observed, the permittee shall:

- a. take timely corrective action such that the smelt dissolving tank resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on the smelt dissolving tank stack in accordance with 40 CFR 60, Appendix A, Method 9 for a minimum of six (6) minutes, to assure visible emissions from the stack do not exceed 20 percent opacity. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observations have been completed. Timely corrective action shall be taken, if necessary, such that the emission unit resumes operation within the 20 percent opacity limit.
- c. If visible emissions observations conducted for a particular source during twelve consecutive weeks show no visible emissions, the permittee with DEQ concurrence, may reduce the monitoring frequency to once per calendar month for that source. Any time the monthly visible emissions inspections show observable opacity, or when requested by DEQ, the monitoring frequency shall be increased to once per week.

The permittee shall maintain an observation log for the smelt dissolving tank stack to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action and the name of the observer. If the smelt dissolving tank has not been operated for any period during the entire week, it shall be noted in the log book.

(9VAC5-80-110 E & K)

#### **Compliance Assurance Monitoring**

**154. Process Equipment Requirements – Recovery Furnace (REC13) – Compliance Assurance Monitoring -** The permittee shall implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor the electrostatic precipitator (RECCD03) controlling PM<sub>10</sub> from the Recovery Furnace (REC13). For the purposes of this permit, PM<sub>10</sub> from the Recovery Furnace is referred to as “PSEU 2” with the acronym PSEU standing for Pollutant Specific Emissions Unit. The approved monitoring plan shall be the attached CAM Plan (Attachment A, Table II) or the most recent revision to this plan that has been: (1) developed and approved pursuant to 40 CFR 64.7(e) and Condition 208; (2) revised pursuant to a Quality Improvement Plan in accordance with 40 CFR 64.8 and Condition 209; or (3) otherwise approved by the DEQ conforming with Condition 202, including, but not limited to, changes initiated by DEQ.

(9VAC5-80-110 and 40 CFR 64.6(c))

- 155. Process Equipment Requirements – Smelt Dissolving Tank (REC14) – Compliance Assurance Monitoring** - The permittee shall implement an approved Compliance Assurance Monitoring (CAM) Plan to monitor the wet scrubber (RECCD04) controlling PM<sub>10</sub> from the Smelt Dissolving Tank (REC14). For the purposes of this permit, PM<sub>10</sub> from the Smelt Dissolving Tank is referred to as “PSEU 3” with the acronym PSEU standing for Pollutant Specific Emissions Unit. The approved monitoring plan shall be the attached CAM Plans (Attachment A, Table III) or the most recent revision to this plan that has been: (1) developed and approved pursuant to 40 CFR 64.7(e) and Condition 208; (2) revised pursuant to a Quality Improvement Plan in accordance with 40 CFR 64.8 and Condition 209; or (3) otherwise approved by the DEQ conforming with Condition 202, including, but not limited to, changes initiated by DEQ. (9VAC5-80-110 and 40 CFR 64.6(c))

### **Recordkeeping**

- 156. Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Recordkeeping** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office. These records shall include, but are not limited to:
- a. Annual throughput of BLS in the Recovery Furnace (REC13), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - b. Annual throughput of natural gas in the Recovery Furnace (REC13), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - c. Monthly emissions calculations for the Recovery Furnace (REC13) and Smelt Dissolving Tank (REC14) to verify compliance with the emissions limitations in Condition numbers 142 and 143.
  - d. Operation and control device monitoring records.
  - e. CEM/COM data.
  - f. Scheduled and unscheduled maintenance.
  - g. Operator training.

- h. Visible emission observation logs as required by Condition 153.
- i. The normal operating secondary voltage measurement for the ESP as required by Condition 147.
- j. The normal operating scrubber liquid flow rate and fan amperage measurements as required by Condition 151.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9VAC5-80-110 and Condition 29 of 05/01/08 Permit Document)

### Testing

- 157. Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Testing** - The Recovery Furnace (REC13) and Smelt Dissolving Tank (REC14) shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.  
(VAC5-80-110 and Condition 11 of 05/01/08 Permit Document)
- 158. Process Equipment Requirements - Recovery Furnace (REC13) - Testing** - At an interval not to exceed five years, the permittee shall conduct performance tests for particulate matter, PM<sub>10</sub>, SO<sub>2</sub>, CO and TRS from the Recovery Furnace (REC13) while burning BLS to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.  
(9VAC5-80-110)
- 159. Process Equipment Requirements - Smelt Dissolving Tank (REC14) – Testing** - At an interval not to exceed five years, the permittee shall conduct performance tests for particulate matter and PM<sub>10</sub> from the Smelt Dissolving Tank (REC14) to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Blue Ridge Regional Office.  
(9VAC5-80-110)
- 160. Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Testing** - Upon request by the DEQ, the permittee shall conduct performance tests to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office.  
(VAC5-80-110 and Condition 27 of 05/01/08 Permit Document)

161. **Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Testing** - Upon request by the DEQ, the permittee shall conduct visible emission evaluations to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office.  
(VAC5-80-110 and Condition 28 of 05/01/08 Permit Document)

#### **Notifications**

162. **Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Notifications** - The permittee shall furnish notification to the Air Compliance Manager, Blue Ridge Regional Office of the intention to shut down or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:
- a. Identification of the air pollution control equipment to be taken out of service, as well as its location, and registration number;
  - b. The expected length of time that the air pollution control equipment will be out of service;
  - c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period; and
  - d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9VAC5-80-110 and Condition 31 of 05/01/08 Permit Document)

163. **Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) – Notifications** - The permittee shall furnish notification to the Air Compliance Manager, Blue Ridge Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Air Compliance Manager, Blue Ridge Regional Office.  
(9VAC5-80-110 and Condition 32 of 05/01/08 Permit Document)

#### **Reporting**

164. **Process Equipment Requirements - Recovery Furnace (REC13) - Reporting** - EERs for the COMS and CEMS will be submitted semi-annually in accordance with 40 CFR §60.8. (9VAC5-80-110 and Condition 33 of 05/01/08 Permit Document)
165. **Process Equipment Requirements - Recovery Furnace & Smelt Dissolving Tank (REC13 & REC14) - Reporting** - Reports for deviations on the Recovery Furnace (REC13) ESP Secondary Voltage and the Smelt Dissolving Tank (REC14) scrubber fan amps and flow indicators will be submitted semi-annually in accordance with 40 CFR §60.8. (9VAC5-80-110 and Condition 34 of 05/01/08 Permit Document)

### **MACT Subpart MM – Chemical Recovery Combustion Sources at Stand-Alone Semichemical Pulp Mills (REC13)**

#### **General Compliance Requirements**

166. **MACT Subpart MM – Recovery Furnace (REC13) - General Compliance Requirements** – Except where this permit is more restrictive than the applicable requirement, the Recovery Furnace (REC13) shall be operated in compliance with the requirements for semi-chemical equipment described in 40 CFR 63, Subpart MM (Pulp and Paper MACT II) as specified in Conditions 166 thru 177. (9VAC5-80-110, 40 CFR 63.860 and Condition 17 of 05/01/08 Permit Document)
167. **MACT Subpart MM – Recovery Furnace (REC13) - General Compliance Requirements** - The permittee shall comply with the applicable General Provisions as specified in Table 1 to Subpart MM of Part 63. (9VAC5-80-110 and 40 CFR 63.860(c))
168. **MACT Subpart MM – Recovery Furnace (REC13) – General Compliance Requirements** - The permittee shall operate and maintain any affected source, including air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the source. (9VAC5-80-110 and 40 CFR 63.860(d))

#### **Standards**

169. **MACT Subpart MM - Recovery Furnace (REC13) – Standards** - The owner or operator of each existing or new semichemical combustion unit must ensure that:

- a. The concentration of gaseous organic HAP, as measured by total hydrocarbons reported as carbon, discharged to the atmosphere is less than or equal to 1.49 kg/Mg (2.97 lb/ton) of black liquor solids fired; or
- b. The gaseous organic HAP emissions, as measured by total hydrocarbons reported as carbon, are reduced by at least 90 percent prior to discharge of the gases to the atmosphere.

(9VAC5-80-110 and 40 CFR 63.862(c)(2))

### **Monitoring Requirements**

**170. MACT Subpart MM – Recovery Furnace (REC13) – Monitoring Requirements** – The permittee shall demonstrate compliance with the 2.97 lbs of HAP per ton of black liquor solids as fired by the use of a Total Hydrocarbon (THC) Continuous Emission Monitor System (CEMS). The CEMS shall be installed, operated and maintained as specified in the Recovery Furnace THC Monitoring Plan. This monitoring plan and all revisions to the plan shall be submitted to the DEQ for approval and shall be maintained onsite and readily available for DEQ inspection.  
(9VAC5-80-110)

**171. MACT Subpart MM – Recovery Furnace (REC13) – Monitoring Requirements** – The permittee shall keep CMS data quality assurance procedures consistent with the requirements in 40 CFR 63.8(d)(1) and (2) on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR Part 63 Subpart MM, to be made available for inspection, upon request, by the Administrator.

- a. If the performance evaluation plan in 40 CFR 63.8(d)(2) is revised, the permittee shall keep previous (i.e. superseded) versions of the performance evaluation plan on record in accordance with 40 CFR 63.864(f).

(9VAC5-80-110 and 40 CFR 63.864(f))

**172. MACT Subpart MM – Recovery Furnace (REC13) – Monitoring Requirements** – As specified in 40 CFR 63.8(g)(5), monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level adjustments must not be included in any data average computed under 40 CFR 63 Subpart MM.  
(9VAC5-80-110 and 40 CFR 63.864(h))

### **Performance Test Requirements and Test Methods**

**173. MACT Subpart MM – Recovery Furnace (REC13) – Testing** - The owner or operator of each affected source or process unit subject to the requirements of 40 CFR Part 63 Subpart



MM shall conduct an initial performance test and periodic performance tests using the procedures listed in 40 CFR 63.7 and 40 CFR 63.865(d); and shall test as follows:

- a. The first of the five-year periodic performance tests must be conducted by October 13, 2020; and thereafter within 5 years following the previous performance test.
  - i. Performance tests shall be conducted based on representative performance (i.e. performance based on normal operating conditions) of the affected source for the period being tested.
  - ii. The permittee must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation.
  - iii. Upon request, the permittee shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests.
- b. Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.2) required by 40 CFR Part 63 Subpart MM, the permittee shall submit the results of the performance test following the procedure specified in 40 CFR 63.867(d)(1)(i) or (d)(1)(ii).
- c. The performance test data referenced in “b” above shall also be submitted to the attention of the Air Compliance Manager, Blue Ridge Regional Office.

(9VAC5-80-110, 40 CFR 63.863(c), 40 CFR 63.865(d) and 40 CFR 63.867(d))

#### **Recordkeeping Requirements**

**174. MACT Subpart MM – Recovery Furnace (REC13) – Recordkeeping** - The permittee shall maintain the following records which includes, but is not limited to the following:

- a. In addition to the general records required by 40 CFR 63.10(b)(2)(iii) and (vi) through (xiv), the permittee shall maintain records of the information in 40 CFR 63.866(c)(1) through (c)(8), as applicable.
- b. Records of total hydrocarbons (as carbon) measured by the CEMS.
- c. Recovery Furnace THC Monitoring Plan.

(9VAC5-80-110 and 40 CFR 63.866(c))

**175. MACT Subpart MM – Recovery Furnace (REC13) – Recordkeeping** - In the event that an affected unit fails to meet an applicable standard, including any emission limit in 40

CFR 63.862 or CPMS operating limit in 40 CFR 63.864, record the number of failures. For each failure, the permittee shall record the date, start time and duration of each failure.

- a. For each failure to meet an applicable standard, record and retain a list of the affected sources or equipment and the information specified in 40 CFR 63.866(d)(2) and (d)(3).

(9VAC5-80-110 and 40 CFR 63.866(d))

### **Notifications and Reporting Requirements**

176. **MACT Subpart MM – Recovery Furnace (REC13) – Notifications** - The permittee shall submit the applicable notifications from 40 CFR Part 63 Subpart A, as specified in Table 1 to Subpart MM of Part 63.

(9VAC5-80-110 and 40 CFR 63.867(a))

177. **MACT Subpart MM – Recovery Furnace (REC13) – Reporting** - The permittee shall submit semiannual excess emissions reports containing the information specified in 40 CFR 63.867(c)(1) through (c)(5).

- a. The permittee shall submit semiannual excess emission reports and summary reports following the procedures specified in 40 CFR 63.867(d)(2) as specified in 40 CFR 63.10(e)(3)(v) and as follows:

- i. Beginning October 11, 2019, notifications required in 40 CFR 63.9(b) and 63.9(h) (including any information specified in 40 CFR 63.867(b)) and semiannual reports shall be submitted to the EPA via CEDRI. (CEDRI can be accessed through the EPA's CDX (<http://cdx.epa.gov>)). The notifications and reports shall be submitted in accordance with 40 CFR 63.867(d)(2); and if applicable, in accordance with 40 CFR 63.867(d)(3) or (d)(4).

- b. The notifications and semiannual excess emission reports referenced in “a” above shall also be submitted to the attention of the Air Compliance Manager, Blue Ridge Regional Office.

(9VAC5-80-110 and 40 CFR 63.867(c) and (d))

### **Process Equipment Requirements – Medium Mill (MM01 & MM03)**

#### **Limitations**

178. **Process Equipment Requirements - Medium Mill (MM01, MM03) – Limitations** -

Visible emissions from the Medium Mill Equipment shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 60% opacity. Failure to meet the requirements of this condition because of the presence of water vapor shall not be a violation of this condition.

(9VAC5-80-110 and 9VAC5-40-80)

## **Monitoring**

**179. Process Equipment Requirements – Medium Mill (MM01, MM03) – Monitoring -** At least one time per calendar week, an observation for the presence of visible emissions from the Medium Mill Equipment shall be made. If visible emissions are observed, the permittee shall:

- a. take timely corrective action such that the equipment resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on the affected equipment in accordance with 40 CFR 60, Appendix A, Method 9 for a minimum of six minutes to assure visible emissions from the equipment does not exceed 20 percent opacity. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observations have been completed. Timely corrective action shall be taken, if necessary, such that the affected equipment resumes operation within the 20 percent opacity limit.
- c. If visible emissions observations conducted for a particular source during twelve consecutive weeks show no visible emissions, the permittee with DEQ concurrence, may reduce the monitoring frequency to once per calendar month for that source. Any time the monthly visible emissions inspections show observable opacity, or when requested by DEQ, the monitoring frequency shall be increased to once per week.

The permittee shall maintain an observation log to demonstrate compliance with this condition. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action and the name of the observer. If the Medium Mill Equipment (MM01, MM03) has not been operated for any period during the entire week, it shall be noted in the log book.

(9VAC5-80-110 E & K)

## **Recordkeeping**

**180. Process Equipment Requirements – Medium Mill (MM01, MM03) – Recordkeeping -**

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall, if requested, be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Visual emission observation logs for the Medium Mill Equipment as required by Condition 179.

- b. Monthly and annual production (in ADTFP) for the No. 1 Paper Machine (MM01). Annual production is calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- c. Monthly and annual production (in ADTFP) for the No. 3 Paper Machine (MM03). Annual production is calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.  
(9VAC5-80-110)

## **Process Equipment Requirements – Linerboard Mill (LBD01, LBD02 & LBD04)**

### **Limitations**

#### **181. Process Equipment Requirements – Linerboard Mill (LBD02) – Limitations -**

Particulate emissions from the starch silo shall be controlled by a fabric filter. The fabric filter shall be provided with adequate access for inspection. The fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. The device shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times.  
(9VAC5-80-110 and Condition 3 of 04/30/12 Permit Document)

#### **182. Process Equipment Requirements – Linerboard Mill (LBD04) – Limitations -** The production of paper from the No. 4 Paper Machine (LBD04) shall not exceed 485,972 ADT of finished paper per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9VAC5-80-110 and Condition 4 of 04/30/12 Permit Document)

#### **183. Process Equipment Requirements – Linerboard Mill (LBD01) – Limitations -** The production of recycled fiber through the OCC (LBD01) shall not exceed 511,000 ODT of pulp per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9VAC5-80-110 and Condition 5 of 04/30/12 Permit Document)

184. **Process Equipment Requirements – Linerboard Mill (LBD04) – Limitations** - The total annual emissions from the operation of the No. 4 Paper Machine (LBD04) shall not exceed the limits specified below:

Pollutants	Emission Limits	
	lb/hr	tons/yr
Volatile Organic Compounds	13	55.9

(9VAC5-80-110 and Condition 15 of 04/30/12 Permit Document)

185. **Process Equipment Requirements – Linerboard Mill (LBD01) – Limitations** - The total annual emissions from the operation of the Recycled Fiber Facility (LBD01) shall not exceed the limits specified below:

Pollutants	Emission Limits	
	lb/hr	tons/yr
Volatile Organic Compounds	0.64	2.8

(9VAC5-80-110 and Condition 16 of 04/30/12 Permit Document)

186. **Process Equipment Requirements – Linerboard Mill (LBD01, LBD04) – Limitations** - Visible emissions from all Linerboard Mill equipment, except the starch silo, shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this condition.

(9VAC5-80-110 and 9VAC5-50-80)

187. **Process Equipment Requirements – Linerboard Mill (LBD02) – Limitations** - Visible emissions from the starch silo fabric filter shall not exceed 5 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).

(9VAC5-80-110 and Condition 19 of 04/30/12 Permit Document)

188. **Process Equipment Requirements – Linerboard Mill (LBD01, LBD02, LBD04) – Limitations** - In order to minimize the duration and frequency of excess emissions due to malfunctions of process equipment or air pollution control equipment, the permittee shall:

- Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance. These records shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request
- Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns.

(9VAC5-80-110 and Condition 27 of 04/30/12 Permit Document)

## Monitoring

### 189. Process Equipment Requirements – Linerboard Mill (LBD01, LBD04) – Monitoring -

At least one time per calendar week, an observation for the presence of visible emissions from the Linerboard Mill Equipment (LBD01, LBD04) shall be made. If visible emissions are observed, the permittee shall:

- a. take timely corrective action such that the affected equipment resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on the affected equipment in accordance with 40 CFR 60, Appendix A, Method 9 for a minimum of six minutes to assure visible emissions from the equipment does not exceed 20 percent opacity. If any of the observations exceed the opacity limitation of 20 percent, the observation period shall continue until a total of sixty (60) minutes of observations have been completed. Timely corrective action shall be taken, if necessary, such that the affected equipment resumes operation within the 20 percent opacity limit.
- c. If visible emissions observations conducted for a particular source during twelve consecutive weeks show no visible emissions, the permittee with DEQ concurrence, may reduce the monitoring frequency to once per calendar month for that source. Any time the monthly visible emissions inspections show observable opacity, or when requested by DEQ, the monitoring frequency shall be increased to once per week.

The permittee shall maintain an observation log to demonstrate compliance with this condition. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action and the name of the observer. If the Linerboard Mill Equipment (LBD01, LBD04) has not been operated for any period during the entire week, it shall be noted in the log book.

(9VAC5-80-110 E & K)

### 190. Process Equipment Requirements – Linerboard Mill (LBD02) Monitoring -

At least one time per calendar week, an observation for the presence of visible emissions from the starch silo fabric filter exhaust shall be made. If visible emissions are observed, the permittee shall:

- a. take timely corrective action such that the starch silo resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on the starch silo fabric filter exhaust in accordance with 40 CFR 60, Appendix A, Method 9 for a minimum of six minutes to assure visible emissions from the filter exhaust do not exceed 5 percent opacity. If any of the observations exceed the opacity limitation of 5 percent, the observation

period shall continue until a total of sixty (60) minutes of observations have been completed. Timely corrective action shall be taken, if necessary, such that the starch silo resumes operation within the 5 percent opacity limit.

- c. If visible emissions observations conducted for a particular source during twelve consecutive weeks show no visible emissions, the permittee with DEQ concurrence, may reduce the monitoring frequency to once per calendar month for that source. Any time the monthly visible emissions inspections show observable opacity, or when requested by DEQ, the monitoring frequency shall be increased to once per week.

The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action and the name of the observer. If the starch silo has not been operated for any period during the entire week, it shall be noted in the log book.

(9VAC5-80-110 E & K)

## **Recordkeeping**

191. **Process Equipment Requirements – Linerboard Mill (LBD01, LBD02, LBD04) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Air Compliance Manager, Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. An annual material balance for the recycled paper processing facility and paper machine No. 4 additives including the additive names, the annual usage, the VOC content, the VOC emitted fraction, and the total annual VOC emissions. The emissions shall be calculated as the sum of each consecutive 12-month period.
- b. The maintenance and associated records required by Condition 188.
- c. Visual emission observation logs for the Linerboard Mill Equipment required by Conditions 189 and 190.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and Condition 21 of 04/30/12 Permit Document)

## **Process Equipment Requirements – Wastewater System (WW02 & WW03)**

### **Limitations**

192. **Process Equipment Requirements – Wastewater System (WW03) - Limitations** - The yearly usage of lime shall not exceed 20,000 tons, calculated monthly as the sum of each consecutive twelve (12) month period.  
(9VAC5-80-110 and Condition 3 of 07/10/02 Permit Document)
193. **Process Equipment Requirements – Wastewater System (WW03) - Limitations** - Visible emissions from the vent baghouse filter shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 10 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.  
(9VAC5-80-110 and Condition 4 of 07/10/02 Permit Document)
194. **Process Equipment Requirements – Wastewater System (WW03) - Limitations** - Particulate Matter emissions from the lime storage silo shall be controlled by a vent baghouse filter. The vent baghouse filter shall be provided with adequate access for inspection and shall be in operation when receiving lime.  
(9VAC5-80-110 and Condition 5 of 07/10/02 Permit Document)
195. **Process Equipment Requirements – Wastewater System (WW02, WW03) - Limitations** – Fugitive dust controls shall include the following, or equivalent, as a minimum:
- a. Dust from haul roads and traffic areas shall be controlled by the application of asphalt, water, suitable chemicals, or equivalent methods approved by the DEQ.
  - b. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt, product, or raw material spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.
- (9VAC5-80-110 and Condition 6 of 07/10/02 Permit Document)
196. **Process Equipment Requirements – Wastewater System (WW02, WW03) - Limitations** - In order to minimize the duration and frequency of excess emissions due to malfunctions of Wastewater System Equipment or air pollution control equipment, the permittee shall:
- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance to air pollution control equipment. These records shall be maintained on site for a period of five (5) years and shall be made available to DEQ personnel upon request;



- b. Maintain an inventory of spare parts that are needed to minimize durations of air pollution control equipment breakdowns;
- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum;
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.  
(9VAC5-80-110 and Condition 15 of 07/10/02 Permit Document)

## **Monitoring**

**197. Process Equipment Requirements – Wastewater System (WW03) - Monitoring -** At least one time per calendar week, an observation for the presence of visible emissions from the lime silo vent baghouse filter exhaust shall be made. If visible emissions are observed, the permittee shall:

- a. take timely corrective action such that the equipment resumes operation with no visible emissions, or,
- b. conduct a visible emission evaluation (VEE) on the lime silo vent baghouse filter exhaust in accordance with 40 CFR 60, Appendix A, Method 9 for a minimum of six minutes to assure visible emissions from the filter exhaust do not exceed 5 percent opacity. If any of the observations exceed the opacity limitation of 5 percent, the observation period shall continue until a total of sixty (60) minutes of observations have been completed. Timely corrective action shall be taken, if necessary, such that the lime silo resumes operation within the 5 percent opacity limit.
- c. If visible emissions observations conducted for a particular source during twelve consecutive weeks show no visible emissions, the permittee with DEQ concurrence, may reduce the monitoring frequency to once per calendar month for that source. Any time the monthly visible emissions inspections show observable opacity, or when requested by DEQ, the monitoring frequency shall be increased to once per week.

The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observations, whether or not there were visible emissions, the results of all VEEs, any necessary corrective action and the name of the observer. If the lime silo has not been operated for any period during the entire week, it shall be noted in the log book.

(9VAC5-80-110 E & K)

### **Notifications**

**198. Process Equipment Requirements – Wastewater System (WW03) - Notifications -** The permittee shall furnish notification to the Director, Blue Ridge Regional Office, of the intention to shutdown or bypass, or both, air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one hour, at least 24 hours prior to the shutdown. The notification shall include, but is not limited to, the following information:

- a. Identification of the specific process to be taken out of service, as well as its location, and registration number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
- d. Measures that will be taken to minimize the length of the shutdown or to negate the effect of the outage.

(9VAC5-80-110 and Condition 9 of 07/10/02 Permit Document)

### **Recordkeeping**

**199. Process Equipment Requirements – Wastewater System (WW03) - Recordkeeping -** The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Blue Ridge Regional Office. These records shall include, but are not limited to:

- a. Visible emission observation logs required by Condition 197.
- b. The annual consumption of lime, in tons, calculated monthly as the sum of the previous consecutive twelve (12) months' production.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110 and Condition 8 of 07/10/02 Permit Document)

### **Miscellaneous Activities (MIS01 & MIS02)**

#### **Limitations**

200. **Process Equipment Requirements – Miscellaneous Activities (MIS01, MIS02) – Limitations** - Visible emissions from the paved and unpaved roads (MIS01, MIS02) shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity. Failure to meet the requirements of 9VAC5-40-80 because of the presence of water vapor shall not be a violation of 9VAC5-40-80.  
(9VAC5-80-110 and 9VAC5-40-80)

201. **Process Equipment Requirements – Miscellaneous Activities (MIS01, MIS02) – Limitations** – The permittee shall take reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.
- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways, and maintaining them in a clean condition.
- c. Installation and use of hoods, fans and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.
- d. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion.
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-80-110 and 9VAC5-40-90)

## **General Compliance Assurance Monitoring (CAM) Requirements**

### **General Compliance Requirements**

202. **Compliance Assurance Monitoring (CAM) - General Requirements** - Each monitoring approach shall be designed and implemented in compliance with 40 CFR 64.3(b) or (d). If a monitoring approach uses a monitoring device, the device shall be operated according to manufacturer's specifications, unless other methods are approved, and in compliance with 40 CFR 64.3(b) or (d). The approved CAM Plan shall include, at a minimum, the following information:

- a. Indicator;

- b. Measurement Approach;
- c. Indicator Range or Condition(s) for Range Development; and
- d. The following performance criteria:
  - i. Data Representativeness;
  - ii. Verification of Operational Status;
  - iii. QA/QC Practices and Criteria;
  - iv. Monitoring Frequency;
  - v. Data Collection Procedures; and
  - vi. Averaging Period

Changes to a CAM Plan pertaining to the information in this condition may require a permit modification.

(9VAC5-80-110 and 40 CFR 64.6(c))

203. **Compliance Assurance Monitoring (CAM) - General Requirements** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.

(9VAC5-80-110 and 40 CFR 64.6(c))

204. **Compliance Assurance Monitoring (CAM) - General Requirements** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(9VAC5-80-110 and 40 CFR 64.7(b))

205. **Compliance Assurance Monitoring (CAM) - General Requirements** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the PSEU is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.

(9VAC5-80-110 and 40 CFR 64.7(c))

206. **Compliance Assurance Monitoring (CAM) - General Requirements** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the PSEU (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal

operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9VAC5-80-110 and 40 CFR 64.7(d)(1))

207. **Compliance Assurance Monitoring (CAM) - General Requirements** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (9VAC5-80-110 and 40 CFR 64.7(d)(2))

208. **Compliance Assurance Monitoring (CAM) - General Requirements** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Blue Ridge Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9VAC5-80-110 and 40 CFR 64.7(e))

209. **Compliance Assurance Monitoring (CAM) - General Requirements** - For each PSEU, the Quality Improvement Plan (QIP) threshold shall be as shown in the following table:

PSEU			QIP Triggering Threshold
ID	Condition Number	Pollutant	
PSEU 1	32	PM <sub>10</sub>	5% of the operating time*
PSEU 2	154	PM <sub>10</sub>	5% of the operating time*
PSEU 3	155	PM <sub>10</sub>	5% of the operating time*

\*during a semi-annual period

For any PSEU, if the number of exceedances or excursions exceeds its threshold in the above table, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the

permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:

- a. Improved preventative maintenance practices;
- b. Process operation changes;
- c. Appropriate improvements to control methods;
- d. Other steps appropriate to correct control performance; and
- e. More frequent or improved monitoring.

(9VAC5-80-110 E and 40 CFR 64.8(a) and (b))

### **Recordkeeping**

210. **Compliance Assurance Monitoring (CAM) - Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under 40 CFR Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).  
(9VAC5-80-110 and 40 CFR 64.9(b))

### **Reporting**

211. **Compliance Assurance Monitoring (CAM) - Reporting** - The permittee shall submit CAM reports for each PSEU as part of the Title V semi-annual monitoring reports required by General Condition 229 of this permit to the Blue Ridge Regional Office. Such reports shall include at a minimum:
- a. Identification of the PSEU for which the report is made;
  - b. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - c. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - d. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan

has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(9VAC5-80-110 F and 40 CFR 64.9(a))

## **Facility Wide Conditions**

212. **Facility Wide Conditions - Record of Malfunctions** - The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown, or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record.  
(9VAC5-80-110, Condition 39 of 05/01/08 Permit Document, Condition 19 of 12/06/10 Permit Document and Condition 25 of 02/04/21 Permit Document)
213. **Facility Wide Conditions – Relationship to Other Requirements – (PWR05)** – Except to the extent that conditions in the 10/05/12 permit may be more stringent, the 10/05/12 permit does not supersede or replace any other valid permit, regulatory or statutory requirement. Furthermore, this approval to operate shall not relieve GP Big Island, LLC of the responsibility to comply with all other local, state and federal regulations, including permit regulations.  
(9VAC5-80-110 and Condition 12 of 10/05/12 Permit Document)
214. **Facility Wide Conditions – Federal Enforceability – (PWR05)** - Once the 10/05/12 permit is approved by the U.S. Environmental Protection Agency into the Commonwealth of Virginia State Implementation Plan, the permit is enforceable by EPA and citizens under the federal Clean Air Act.  
(9VAC5-80-110 and Condition 13 of 10/05/12 Permit Document)
215. **Facility Wide Conditions – Permit Modification – (PWR05)** - The Board may revise (modify, rewrite, change or amend) or repeal the 10/05/12 permit with the consent of GP Big Island, LLC, for good cause shown by GP Big Island, LLC, or on its own motion provided approval of the revision or repeal is accomplished in accordance with Regulations of the Board and the Administrative Process Act (§ 2.2-4000 et seq.). Such revision or repeal shall not be effective until the revision or repeal is approved by the U. S. Environmental Protection Agency following the requirements of 40 CFR Part 51 (Requirements for Preparation, Adoption, and Submittal of Implementation Plans).  
(9VAC5-80-110 and Condition 14 of 10/05/12 Permit Document)
216. **Facility Wide Conditions – Failure to Comply – (PWR05)** - Failure by GP Big Island, LLC to comply with any of the conditions of the 10/05/12 permit shall constitute a violation of a Permit of the Board. Failure to comply may result in a Notice of Violation and civil penalty. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of orders as appropriate by the Board as a result of such violations. Nothing

herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.

(9VAC5-80-110 and Condition 15 of 10/05/12 Permit Document)

**217. Facility Wide Conditions - Condition for Granting Permit – (PWR05) -** No project shall result in a major modification as defined in 9VAC5-80-1615 without receiving a permit pursuant to 9VAC5-80 Article 8. For projects which rely on projected emissions, not potential to emit, to be exempt from review under 9VAC5-80 Article 8, the following conditions shall apply:

- a. The permittee shall maintain records sufficient to demonstrate the project did not result in a major modification as defined in 9VAC5-80-1615. Any increase in emissions without sufficient documentation to demonstrate it was not caused by a project shall be attributed to that project.
- b. If annual emissions after a project (12 month rolling total) exceed the projected actual emissions for the project, the permittee shall notify the Blue Ridge Regional Office within thirty (30) days after the event.

For each applicable project, Conditions 217.a and 217.b are effective for the projection period as prescribed in the definition of “projected actual emissions” located in 9VAC5-80-1615. Nothing in this condition shall restrict when the Board may find the permittee in violation of 9VAC5-80-1625 A.

(9VAC5-80-110 and Condition 13 of 02/04/21 Permit Document)

**218. Facility Wide Conditions - Existing Source Standard for Visible Emissions -** Unless otherwise specified in this permit, the permittee shall not cause or permit to be discharged into the atmosphere from any affected facility (constructed, modified or relocated prior to March 17, 1972, or reconstructed prior to December 10, 1976) any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section.

(9VAC5-80-110 and 9VAC5-40-80)

**219. Facility Wide Conditions - New Source Standard for Visible Emissions -** Unless otherwise specified in this permit, on or after the date on which the performance test required to be conducted by 9VAC5-50-30 is completed, the permittee shall not cause or permit to be discharged into the atmosphere from any affected facility (constructed, modified or relocated after March 17, 1972, or reconstructed on or after December 10, 1976) any visible emissions which exhibit greater than 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). Failure to meet the requirements of this section because of the presence of water vapor shall not be a violation of this section.

(9VAC5-80-110 and 9VAC5-50-80)



## Testing

220. **Facility Wide Conditions - Testing** - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.

(9VAC5-80-110, Condition 8 of 04/30/12 Permit Document and Condition 14 of 02/04/21 Permit Document)

221. **Facility Wide Conditions - Testing** - If testing to demonstrate compliance is conducted in addition to the monitoring specified in this permit, the permittee shall use either the specific test methods specified in the Conditions of this permit, or the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method - The test method is subject to DEQ approval at the time of the test (except Method 9 - 40 CFR Part 60, Appendix A)
Various Pollutants	Method subject to DEQ approval at the time of testing.
Visible Emission	EPA Method 9

(9VAC5-80-110 E & K)

## Reporting

222. **Facility Wide Conditions - Reporting** - Reports related to New Source Performance Standards (NSPS), Hazardous Air Pollutant Monitoring (MACT), or Continuous Emission or Opacity Monitoring Systems (CEMS/COMS) shall meet the applicable requirements of the applicable MACT, NSPS, or Virginia Regulation for the Control and Abatement of Air Pollution at the time of the report. Reporting periods shall be each calendar quarter and/or each calendar semi-annual period, as appropriate. A mixture of reporting periods is possible. At the time of issuance of this permit, (a) CEMS/COMS reports are required quarterly no later than 30 days after each calendar quarter ends, and (b) MACT reports are required semi-annually no later than 30 days after each calendar semi-annual period ends. Details of quarterly and semi-annual reports may change based on the applicable regulation and as arranged with the Blue Ridge Regional Office at the time of each report. If the facility submits a report on a quarterly basis, a separate semi-annual report is not required. Specific details of the reports are to be arranged with the Blue Ridge Regional Office. Each report shall be sent to the Virginia Department of Environmental Quality at the address below (or electronically as arranged with the Blue Ridge Regional Office) and copies of the reports, as applicable, shall be sent to the United States Environmental Protection Agency at the address below:

**Virginia Department of Environmental Quality**  
**Blue Ridge Regional Office**  
Attn: Air Compliance Manager  
901 Russell Drive  
Salem, VA 24153

Air Protection Division (3AP00)  
**U.S. Environmental Protection Agency**  
 Region III  
 1650 Arch Street  
 Philadelphia, PA 19103-2029  
 Attn: (As appropriate for EPA)  
 Coordinator for 40 CFR 63 Subpart S (Pulp Mill MACT)  
 Coordinator for 40 CFR 63 Subpart MM (Kraft Pulp Mill Recovery MACT)  
 Coordinator for 40 CFR 60 Subpart BB (Kraft Pulp Mill NSPS)  
 Coordinator for 40 CFR 60 Subpart Db (Industrial Boiler NSPS)

(9VAC5-80-110 E & K)

## Insignificant Emission Units

223. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

<b>Emission Unit No.</b>	<b>Emission Unit Description</b>	<b>Citation</b>	<b>Pollutant(s) Emitted (9VAC5-80-720B)</b>	<b>Rated Capacity (9VAC5-80-720C)</b>
PWR02	Process Water Treatment	9VAC5-80-720A	---	---
PWR03	Boiler Water Treatment	9VAC5-80-720A	---	---
PWR08	Fly Ash Handling	9VAC5-80-720B	PM <sub>10</sub>	---
PWR11	Lube Oil Reservoirs	9VAC5-80-720C		< 1000 gal each
CH01	Chip receiving, storage, and conveying	9VAC5-80-720B	PM <sub>10</sub> , VOC	---
CH02	Chip screening and conveying	9VAC5-80-720B	PM <sub>10</sub> , VOC	---
CH03	Screened Chip conveying	9VAC5-80-720B	PM <sub>10</sub> , VOC	---
PULP01	Pulp Mill Chip Storage & Conveying System	9VAC5-80-720B	PM <sub>10</sub>	---
PULP05	Refiners	9VAC5-80-720B	VOC	---
PULP06	DLK Pulp System	9VAC5-80-720B	VOC, HAP	---
PULP07	Secondary Fiber System	9VAC5-80-720B	VOC, HAP	---
PULP08	Finished Liquor Storage Tank	9VAC5-80-720B	VOC, HAP	---
REC07	Liquor – Making System	9VAC5-80-720B	VOC, HAP	---
REC08	Caustic Storage System	9VAC5-80-720B	PM <sub>10</sub>	---
REC09	Condensate Storage System	9VAC5-80-720B	VOC, HAP	---

<b>Emission Unit No.</b>	<b>Emission Unit Description</b>	<b>Citation</b>	<b>Pollutant(s) Emitted (9VAC5-80-720B)</b>	<b>Rated Capacity (9VAC5-80-720C)</b>
REC10	Lube Oil Systems	9VAC5-80-720B	VOC	---
REC11	Soda Ash System	9VAC5-80-720B	VOC, HAP	---
MM02	No. 1 Paper Machine Winder	9VAC5-80-720B	VOC, HAP	---
MM04	No. 3 Paper Machine Winder	9VAC5-80-720B	VOC, HAP	---
MM05	Broke and Whitewater Storage	9VAC5-80-720B	VOC, HAP	---
MM06	Lubrication Oil Systems	9VAC5-80-720B	VOC	---
MM07	Additive Storage Tanks	9VAC5-80-720B	VOC	---
MM08	Refiners	9VAC5-80-720B	VOC, HAP	---
MM09	Nos. 1 & 3 Paper Machine Forward Cleaner Systems	9VAC5-80-720B	VOC, HAP	---
LBD01	Recycled Fiber Facility	9VAC5-80-720B	VOC, HAP	---
LBD03	Cooling Tower	9VAC5-80-720A	---	---
LBD05	Lubrication System	9VAC5-80-720B	VOC	---
LBD06	Glycol-Based Heating System	9VAC5-80-720B	VOC	---
LBD07	OCC Bale Storage Area	9VAC5-80-720B	PM <sub>10</sub>	---
LBD08	OCCR Storage Bunker	9VAC5-80-720B	PM <sub>10</sub>	---
WW01	Sanitary Wastewater Treatment	9VAC5-80-720B	VOC	---
MIS03	Landfill Activities	9VAC5-80-720B	PM <sub>10</sub>	---
MIS04	Solvent-based Parts Washers	9VAC5-80-720B	VOC, HAP	---

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110. (9VAC5-80-110)

## Permit Shield & Inapplicable Requirements

224. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

<b>Citation</b>	<b>Title of Citation</b>	<b>Description of Applicability</b>
40 CFR 60 Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators	The No. 5 Boiler is not subject to this standard as the rated capacity on fossil fuel is less than 250 MMBtu/hr.  The No. 6 Boiler & No. 7 Boiler are exempt from this standard per 40 CFR 60.40b(j).
40 CFR 60 Subpart Da	Standards of Performance for Electric Steam Generating Units	There are no electric utility steam generating units at the Big Island Mill.
40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	There are no steam generating units at the Big Island Mill that meet the applicability criteria in 40 CFR 60.40c.
40 CFR 60 Subpart BB	Standards of Performance for Kraft Pulp Mills	This standard does not apply to semichemical pulping processes.
40 CFR 60 Subpart BBa	Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013	This standard does not apply to semichemical pulping processes.
40 CFR 61 Subpart E	National Emission Standard for Mercury	The facility does not incinerate the wastewater treatment plant sludge or meet any of the applicability criteria outlined in 40 CFR 60.50.
40 CFR 63 Subpart Q	National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers	The facility does not operate any industrial process cooling towers that use chromium-based water treatment chemicals.
40 CFR 63 Subpart T	National Emission Standards for Halogenated Solvent Cleaning	The facility does not conduct batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning operations that uses solvents containing greater than 5% by weight of any combination of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform.

40 CFR 63 Subpart RR	National Emission Standards for Individual Drain Systems	The facility does not operate any individual drain systems for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control. Semichemical condensate collection systems are not required to be controlled as outlined in Subpart RR.
40 CFR 63 Subpart EEEE	National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)	The facility does not operate an organic liquids distribution (OLD) operation as defined in 40 CFR 63.2406.
40 CFR 63 Subpart JJJJ	National Emission Standards for Hazardous Air Pollutants: Paper and Other Web Coating	The facility does not operate any web coating lines as defined in 40 CFR 63.3310.
9VAC5 Chapter 40, Article 17	Emission Standards for Woodworking Operations	In accordance with 9VAC5-40-2260 (Definitions), Chip Handling is not considered a "Woodworking operation".

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9VAC5-80-110 E & K and 9VAC5-80-140)

## General Conditions

**225. General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9VAC5-80-110)

**226. General Conditions - Permit Expiration**

- a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- c. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the Board takes final action on the application under 9VAC5-80-150.
- d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
- e. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- f. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

**227. General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

228. **General Conditions - Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9VAC5-80-110)

229. **General Conditions - Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
  - i. Exceedances of emissions limitations or operational restrictions;
  - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring or periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
  - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semiannual reporting period."

(9VAC5-80-110)

230. **General Conditions - Annual Compliance Certification** - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5)

years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9VAC5-80-110, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:  
R3\_APD\_Permits@epa.gov

(9VAC5-80-110)

231. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Blue Ridge Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. The occurrence should also be reported in the next semiannual compliance monitoring report pursuant to Condition 229 of this permit.

(9VAC5-80-110 F.2)

232. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Blue Ridge Regional



Office such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Blue Ridge Regional Office.

(9VAC5-80-110, Condition 10 of 07/10/02 Permit Document, Condition 20 of 12/06/10 Permit Document, Condition 26 of 4/30/12 Permit Document and Condition 26 of 02/04/21 Permit Document)

233. **General Conditions - Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9VAC5-40-50 C and 9VAC5-50-50 C are not subject to the 14 day written notification.  
(9VAC5-20-180, 9VAC5-40-50 and 9VAC5-50-50)

234. **General Conditions - Failure/Malfunction Reporting** - The emission units subject to the reporting and the procedure requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are listed below:

- a. No. 5 Power Boiler (PWR05): carbon monoxide, opacity
- b. Power Boiler No. 6 (PWR06): NO<sub>x</sub>
- c. Power Boiler No. 7 (PWR07): NO<sub>x</sub>
- d. Recovery Furnace (REC13): NO<sub>x</sub>, opacity

(9VAC5-80-110, 9VAC5-20-180 C and 9VAC5-50-50 C)

235. **General Conditions - Failure/Malfunction Reporting** - Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9VAC5-40-41 or 9VAC5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9VAC5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board in accordance with the specified time period. All reports shall include the following information:

- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9VAC5-40-41 B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9VAC5-40-50 C and 9VAC5-50-50 C require written reports within 14 days of the discovery of the malfunction.  
(9VAC5-80-110, 9VAC5-20-180 C, 9VAC5-40-50 and 9VAC5-50-50)

236. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.  
(9VAC5-80-110)
237. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.  
(9VAC5-80-110)
238. **General Conditions - Need to Halt or Reduce Activity not a Defense** - It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.  
(9VAC5-80-110)
239. **General Conditions - Permit Modification** - A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.  
(9VAC80-110, 9VAC5-80-190, and 9VAC5-80-260)
240. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.  
(9VAC5-80-110)
241. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the

permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.

(9VAC5-80-110)

242. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G.

(9VAC5-80-110)

243. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit was issued under 9VAC5-80-50 through 9VAC5-80-300 shall pay annual emissions fees, as applicable, consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 and annual maintenance fees, as applicable, consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350.

(9VAC5-80-110, 9VAC5-80-310 et seq., and 9VAC5-80-2310 et seq.)

244. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-80-110, 9VAC5-40-90 and 9VAC5-50-90)

**245. General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.  
(9VAC5-80-110 and 9VAC5-50-20 E)

**246. General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1.  
(9VAC5-80-110)

**247. General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110)

**248. General Conditions - Reopening for Cause** - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to

expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

249. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.  
(9VAC5-80-110 and 9VAC5-80-150)

250. **General Conditions - Transfer of Permits**

- a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-110 and 9VAC5-80-160)

251. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may

prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.  
(9VAC5-80-110, 9VAC5-80-190 C, and 9VAC5-80-260)

252. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.  
(9VAC5-80-110 and 9VAC5-80-80 E)
253. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.  
(9VAC5-80-110 and 40 CFR Part 82)
254. **General Conditions - Asbestos Requirements** - The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).  
(9VAC5-60-70 and 9VAC5-80-110)
255. **General Conditions - Accidental Release Prevention** - If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.  
(9VAC5-80-110 and 40 CFR Part 68)
256. **General Conditions - Changes to Permits for Emissions Trading** - No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.  
(9VAC5-80-110)
257. **General Conditions - Emissions Trading** - Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.

- b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110)

## **NO<sub>x</sub> Budget Program, 9VAC5 Chapter 140**

### **General Conditions**

**258. NO<sub>x</sub> Budget Program Requirements** – For NO<sub>x</sub> Budget sources required to have a Title V operating permit approval, the NO<sub>x</sub> budget portion of the Title V permit shall be administered in accordance with the permitting authority's Title V operating permits regulations. This section of the permit document represents the NO<sub>x</sub> Budget Permit approval.

Each NO<sub>x</sub> Budget permit approval shall contain all applicable NO<sub>x</sub> Budget Program requirements and shall be a complete and segregable portion of the permit approval.

The NO<sub>x</sub> Budget Permit approval will be administrated by the Board under the authority of 9VAC5-80-360 et seq., and 9VAC5-140-10 et seq.  
(9VAC5-80-110, 9VAC5-140-200 and 9VAC5-140-40)

**259. NO<sub>x</sub> Budget Program Requirements – Facility NO<sub>x</sub> Budget Units** - A review of the air emission units included in this permit approval has determined that the equipment listed in Table 1 meets the definition of a "NO<sub>x</sub> Budget Unit" as described in 9VAC5-140-40. Any source that includes one or more such units shall be a "NO<sub>x</sub> Budget source."

Table 1. Facility NO<sub>x</sub> Budget Units

<b>ORIS Code</b>	<b>Unit ID</b>	<b>Unit Name and description</b>	<b>Maximum Heat Capacity (MMBtu/hr)</b>	<b>Maximum Generation Capacity (megawatts)</b>
50479	6	Power Boiler No. 6 Foster-Wheeler, D-type package boiler; installed 1995	284.9 (natural gas)	NA

(9VAC5-80-110 and 9VAC5-140-40)

**260. NO<sub>x</sub> Budget Program Requirements – Retired Unit Exemption** - The equipment in Table 3 has met the retired unit exemption requirements the NO<sub>x</sub> Budget program as described in 9VAC5-140-50 B. 1. The retired unit exemption described in this condition

shall become effective the day on which the unit is permanently retired. Within 30 days of permanent retirement, the NO<sub>x</sub> authorized account representative shall submit a statement to DEQ and EPA detailing that the unit(s) is permanently retired and will comply with the requirements of 9VAC5-140-50 C, including, but not limited to:

- a. A unit exempt from the NO<sub>x</sub> Budget Program shall not emit any nitrogen oxides, starting on the date that the exemption takes effect; and
- b. For a period of five years from the date the records are created, the owners and operators of a unit exempt under 9VAC5-140-50 shall retain at the source that includes the unit, records demonstrating that the unit is permanently retired. Owners and operators bear the burden of proof that the unit is permanently retired.

Table 2. NO<sub>x</sub> Budget Retirement Exemption Units

ORIS Code	Unit ID	Unit Name and description
50479	4	No. 4 Boiler: Combustion Engineering, 4 drum sterling with air preheater; built 1943, installed 1965

(9VAC5-80-110 and 9VAC5-140-50)

## Monitoring

### 261. NO<sub>x</sub> Budget Program Requirements – Monitoring

- a. Owners and operators, and to extent applicable, the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget unit shall comply with the monitoring requirements as provided in 9VAC5-140-700 et. seq. and in Subpart H of 40 CFR Part 75.
- b. The owner or operator of each NO<sub>x</sub> Budget unit shall meet the following requirements:
  - i. Install all monitoring systems required under this article for monitoring NO<sub>x</sub> mass. This includes all systems required to monitor NO<sub>x</sub> emission rate, NO<sub>x</sub> concentration, heat input, and flow, in accordance with 40 CFR 75.71 and 40 CFR 75.72.
  - ii. Install all monitoring systems for monitoring heat input.
  - iii. Successfully complete all certification tests required under 9VAC5-140-710 and meet all other provisions of this article and 40 CFR Part 75 applicable to the monitoring systems under 9VAC5-140-700 B.1 and B.2.



- iv. Record, and report data from the monitoring systems under 9VAC5-140-700 B.1 and B.2.
- c. The owner or operator shall meet the requirements of 9VAC5-140-700 B.1, B.2 and B.3 on or before May 1, 2003 and shall record and report data on and after the following date, May 1, 2003.
- d. The owner or operator of a NO<sub>x</sub> Budget unit under 9VAC5-140-700 C. 2., C. 3., or C. 4. shall determine, record, and report NO<sub>x</sub> mass emissions, heat input rate, and any other values required to determine NO<sub>x</sub> mass emissions in accordance with 40 CFR 75.70(g), from the date and hour that the unit starts operating until the date and hour on which the continuous emission monitoring system, excepted monitoring system under Appendix D or E of 40 CFR Part 75, or excepted monitoring methodology under 40 CFR 75.19 is provisionally certified.
- e.
  - i. No owner or operator of a NO<sub>x</sub> Budget unit or a non-NO<sub>x</sub> Budget unit monitored under 40 CFR 75.72(b)(2)(ii) shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring system without having obtained prior written approval in accordance with 9VAC5-140-750.
  - ii. No owner or operator of a NO<sub>x</sub> Budget unit or a non-NO<sub>x</sub> Budget unit monitored under 40 CFR 75.72(b)(2)(ii) shall operate the unit so as to discharge, or allow to be discharged, NO<sub>x</sub> emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of 9VAC5-140-700 and 40 CFR Part 75 except as provided in 40 CFR 75.74.
  - iii. No owner or operator of a NO<sub>x</sub> Budget unit or a non-NO<sub>x</sub> Budget unit monitored under 40 CFR 75.72(b)(2)(ii) shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NO<sub>x</sub> mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed.
  - iv. No owner or operator of a NO<sub>x</sub> Budget unit or a non-NO<sub>x</sub> Budget unit monitored under 40 CFR 75.72(b)(2)(ii) shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved emission monitoring system under this article except for under the following circumstances:
    - (1) A retired unit exemption goes into effect;

- (2) The owner or operator is monitoring emissions from the unit with another certified monitoring system that has been approved by the permitting authority; or
- (3) The NO<sub>x</sub> authorized account representative submits notification of the date of certification testing of a replacement monitoring system in accordance with 9VAC5-140-710 A. 2.  
 (9VAC5-80-110 and 9VAC5-140-700)

**262. NO<sub>x</sub> Budget Program Requirements – Initial Certification and Recertification Procedures for Emission Monitoring Systems**

- a. The owner or operator of a NO<sub>x</sub> Budget unit shall comply with the following initial certification and recertification procedures:

Table 3. Certification and Recertification Procedures

Unit Type	Initial Certification and Recertification Procedures
NO <sub>x</sub> Budget Unit	9VAC5-140-710 A.
NO <sub>x</sub> Budget Unit Qualified for Low Mass Emission Monitoring (qualifies for LME monitoring methodology under 40 CFR 75.19)	9VAC5-140-710 A. 9VAC5-140-710 B.
NO <sub>x</sub> Budget Unit Approved for Alternative Monitoring (unit qualifies under Subpart E of 40 CFR Part 75)	9VAC5-140-710 A. 9VAC5-140-710 C.

- b. Whenever the owner or operator installs a monitoring system in order to meet the requirements of the NO<sub>x</sub> Budget Program where no such emission monitoring system was previously installed, initial certification is required.
- c. Whenever the owner or operator makes a replacement, modification, or change in a certified emission monitoring system that may significantly affect the ability of the system to accurately measure or record NO<sub>x</sub> mass emissions or heat input rate or to meet the requirements of 40 CFR 75.21 or Appendix B to 40 CFR Part 75, the owner or operator shall recertify the emission monitoring system.
- d. Whenever the owner or operator makes a replacement, modification or change to the flue gas handling system or the unit's operation that may significantly change the stack flow or concentration profile, the owner or operator shall recertify the continuous emissions monitoring system.

- e. The NO<sub>x</sub> authorized account representative shall submit to the permitting authority, the EPA Region III Office, and the Administrator a written notice of the dates of certification in accordance with 9VAC5-140-730.

(9VAC5-80-110 and 9VAC5-140-710)

**263. NO<sub>x</sub> Budget Program Requirements - Initial Certification and Recertification**

**Procedures for Emission Monitoring Systems** - The NO<sub>x</sub> authorized account representative shall submit an application to the permitting authority within 45 days after completing all initial certification or recertification tests required under 9VAC5-140-710 including information required under Subpart H of 40 CFR Part 75.

(9VAC5-80-110 and 9VAC5-140-740 C.)

**Recordkeeping and Reporting**

- 264. NO<sub>x</sub> Budget Program Requirements** – The NO<sub>x</sub> authorized account representative shall follow the recordkeeping and reporting requirements as described in 9VAC5-140-100 E.1. and 40 CFR 75.73.

(9VAC5-80-110 and 9VAC5-140-740 A.)

- 265. NO<sub>x</sub> Budget Program Requirements** - Unless otherwise provided, the owners and operators of the NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit at the source shall keep on site at the source each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the permitting authority or the administrator.

- a. The account certificate of representation for the NO<sub>x</sub> authorized account representative for the source and each NO<sub>x</sub> Budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 9VAC5-140-130; provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NO<sub>x</sub> authorized account representative.
- b. All emissions monitoring information, in accordance with 9VAC5-140-700 et seq. of this part; provided that to the extent that 9VAC5-140-700 et seq. provides for a three-year period for recordkeeping, the three-year period shall apply.
- c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO<sub>x</sub> Budget Program.
- d. Copies of all documents used to complete a NO<sub>x</sub> Budget permit application and any other submission under the NO<sub>x</sub> Budget Program or to demonstrate compliance with the requirements of the NO<sub>x</sub> Budget Program.

(9VAC5-80-110 and 9VAC5-140-60 C.1)

**266. NO<sub>x</sub> Budget Program Requirements** – The NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit at the source shall submit the reports and compliance certifications required under the NO<sub>x</sub> Budget Program, including those under 9VAC5-140-700 et seq. and in Subpart H of 40 CFR Part 75.  
(9VAC5-80-110, 9VAC5-140-60 C.2, and 9VAC5-140-700)

**267. NO<sub>x</sub> Budget Program Requirements** - The owner or operator of a unit shall comply with requirements of 40 CFR 75.62 (Monitoring plan submittals), except that the monitoring plan is only required to include the information required by Subpart H of 40 CFR Part 75.  
(9VAC5-80-110 and 9VAC5-140-740 B.)

**268. NO<sub>x</sub> Budget Program Requirements** - The NO<sub>x</sub> authorized account representative shall submit quarterly reports as follows:

- a. If owner or operator of a NO<sub>x</sub> Budget unit chooses to meet the annual reporting requirements of Article 8 of 9VAC5-140, the NO<sub>x</sub> authorized account representative shall submit a quarterly report, documenting the NO<sub>x</sub> mass emissions from the unit(s) per the guidelines of 9VAC5-140-740 D.;
- b. The NO<sub>x</sub> authorized account representative shall either:
  - i. Meet all of the requirements of 40 CFR Part 75 related to monitoring and reporting NO<sub>x</sub> mass emissions during the entire year and meet the reporting deadlines specified in 9VAC5-140-740 D. 1; or
  - ii. Submit quarterly reports, documenting NO<sub>x</sub> mass emissions from the unit(s), only for the period from May 1 through September 30 of each year and including the data described in 40 CFR 75.74 (c)(6). The NO<sub>x</sub> authorized account representative shall submit quarterly reports per the guidelines of 9VAC5-140-740 D. 2. (b).
- c. The NO<sub>x</sub> authorized account representative shall submit each quarterly report to the administrator within 30 days following the end of the calendar quarter covered by the report. Quarterly reports shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR 75.64.

(9VAC5-80-110 and 9VAC5-140-740 D.)

## Testing

**269. NO<sub>x</sub> Budget Program Requirements** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports will be provided at the appropriate locations.

(9VAC5-80-110, 9VAC5-40-30 and 9VAC5-50-30)

270. **NO<sub>x</sub> Budget Program Requirements** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with test method procedures approved by the DEQ:

Table 4. Test Methods

Pollutant or Stack Parameter	Test Method 40 CFR 60
Nitrogen Oxide – Stationary Sources	USEPA Method 7

(9VAC5-80-110 and 9VAC5-140-700)

### Liability

271. **NO<sub>x</sub> Budget Program Requirements** - The following requirements concerning liability shall apply:
- Any person who knowingly violates any requirement or prohibition of the NO<sub>x</sub> Budget Program, a NO<sub>x</sub> Budget permit, or an exemption under 9VAC5-140-50 shall be subject to enforcement pursuant to applicable State or Federal law.
  - Any person who knowingly makes a false material statement in any record, submission, or report under the NO<sub>x</sub> Budget Program shall be subject to criminal enforcement pursuant to the applicable State or Federal law.
  - No permit revision shall excuse any violation of the requirements of the NO<sub>x</sub> Budget Program that occurs prior to the date that the revision takes effect.
  - NO<sub>x</sub> Budget source and each NO<sub>x</sub> Budget unit shall meet the requirements of the NO<sub>x</sub> Budget Program.
  - Any provision of the NO<sub>x</sub> Budget Program that applies to a NO<sub>x</sub> Budget source or the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget source shall also apply to the owners and operators of such source and of the NO<sub>x</sub> Budget units at the source.
  - Any provision of the NO<sub>x</sub> Budget Program that applies to a NO<sub>x</sub> Budget unit or the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget unit shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under Article 8 (9VAC5-140-700 et seq.), the owners and operators and the NO<sub>x</sub> authorized account representative of one NO<sub>x</sub> Budget unit shall not be liable for any violation by any other NO<sub>x</sub> Budget unit of which they are not owners or operators or the NO<sub>x</sub> authorized account representative and that is

located at a source of which they are not owners or operators or the NO<sub>x</sub> authorized account representative.

(9VAC5-80-110 and 9VAC5-140-60 D.)

#### **Effect on Other Authorities**

272. **NO<sub>x</sub> Budget Program Requirements** - No provision of the NO<sub>x</sub> Budget Program, a NO<sub>x</sub> Budget permit application, a NO<sub>x</sub> Budget permit, or an exemption under 9VAC5-140-50 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO<sub>x</sub> authorized account representative of a NO<sub>x</sub> Budget source or NO<sub>x</sub> Budget unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.  
(9VAC5-80-110 and 9VAC5-140-60 E.)

## **Attachment A - Compliance Assurance Monitoring Plans**

Table 1: No. 5 Power Boiler – PM<sub>10</sub> CAM Plan

Table 2: Recovery Furnace – PM<sub>10</sub> CAM Plan

Table 3: Smelt Dissolving Tank – PM<sub>10</sub> CAM Plan

**Table I**

**PSEU 1**

<b>Unit ID:</b> PWR05		<b>Unit Description:</b> No. 5 Power Boiler (PWR05)	
<b>Control Device ID:</b> PWRCD02 & PWRCD04		<b>Control Device Type:</b> Electrostatic Precipitators (ESPs) 1 chamber 5 -fields	
<b>Pollutant(s):</b> PM <sub>10</sub>			
<b>Regulatory Requirement:</b> Condition 8 of the 10/5/12 Permit Document and Condition 18 of the 02/04/21 Permit Document			
<b>Most Stringent Limitation:</b> 0.07 lb/MMBtu (Condition 8); 20.3 lbs/hr (Condition 18)			
<b>CAM Description:</b> The No. 5 Boiler is equipped with a COMS installed on each stack (E26 and E27) to continuously monitor opacity. Opacity is limited to 20% as a 6-minute average. GP proposes that the continuous opacity monitoring requirements also meet the CAM requirements for PM <sub>10</sub> .			
<b>Indicator</b>		Continuous Opacity Monitoring System (COMS)	
<b>Measurement Approach</b>		The opacity measurements and records are maintained in the COMS Data Acquisition System (DAS).	
<b>Indicator Range</b>		Opacity is limited to 20% opacity. The indicator range is 0 to 18% opacity. An excursion is defined as the average of (3) consecutive six-minute periods (e.g. 11:00 – 11:18) when opacity exceeds 18%. All excursions trigger investigation which may result in corrective action. All excursions will be reported as outlined in Condition 211 of the Title V permit.	
<b>QIP Threshold</b>		A QIP will be developed and implemented if the number of excursions exceeds 5% duration of the operating time during a semi-annual reporting period.	
<b>Performance Criteria: Data Representativeness</b>		Opacity is a common indicator of performance of dry particulate matter emissions controls. An increase in opacity or visible emissions generally corresponds to a decrease in ESP performance and/or blockage in the mechanical collectors. COM requirements are an adequate continuous monitoring method proposed by USEPA for applicable particulate matter emission limits proposed and promulgated since November 15, 1990.	
<b>Verification of Operational Status</b>		DCS data is displayed to operators and alarm set points are established.	
<b>QA/QC Practices and Criteria</b>		Perform QA/QC and calibration per manufacturer’s specifications and recommended operation and maintenance practices.	
<b>Monitoring Frequency</b>		COMS data reduced to six-minute averages. Six-minute averages shall be calculated from 24 or more data points spaced out at approximately equal intervals over each six-minute period and shall be rounded to the nearest one percent. Data recorded during periods of system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages.	
<b>Data Collection Procedures and Averaging Period</b>		Continue operation of existing COMS. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS shall be in continuous operation and shall complete a minimum of one cycle of sampling and analyzing for each successive 15-second period and one cycle of data recording for each successive six-minute period.	



**Table II**

**PSEU 2**

<b>Unit ID:</b> REC13		<b>Unit Description:</b> Recovery Furnace – 400,000 lbs/day BLS	
<b>Control Device ID:</b> RECCD03		<b>Control Device Type:</b> Air Tech ESP – 2 chambers, 4 fields per chamber	
<b>Pollutant(s):</b> PM <sub>10</sub>			
<b>Regulatory Requirement:</b> Condition 18 of the 5/1/08 Permit Document			
<b>Most Stringent Limitation:</b> 0.015 gr/dscf @ 8% O <sub>2</sub>			
<b>CAM Description:</b> The Recovery Furnace is equipped with a COMS to continuously measure opacity. Opacity is limited to 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity. GP proposes that the continuous opacity monitoring requirements also meet the CAM requirements for PM <sub>10</sub> . The use of opacity as an indicator of PM compliance is also consistent with what is required for Kraft and soda recovery furnaces in 40 CFR 63, Subpart MM.			
<b>Indicator</b>		Continuous Opacity Monitoring System (COMS)	
<b>Measurement Approach</b>		The opacity measurements and records are maintained in the COMS Data Acquisition System (DAS).	
<b>Indicator Range</b>		Opacity is limited to 20% opacity, except for one six-minute period in any one hour of not more than 30% opacity. The indicator range is 0 to 18% opacity. An excursion is defined as the average of (3) consecutive six-minute periods (e.g. 11:00 – 11:18) when opacity exceeds 18%. All excursions trigger investigation which may result in corrective action. All excursions will be reported as outlined in Condition 211 of the Title V permit.	
<b>QIP Threshold</b>		A QIP will be developed and implemented if the number of excursions exceeds 5% duration of the operating time during a semi-annual reporting period.	
<b>Performance Criteria: Data Representativeness</b>		Opacity is a common indicator of performance of dry particulate matter emissions controls. An increase in opacity or visible emissions generally corresponds to a decrease in ESP performance. COM requirements are an adequate continuous monitoring method proposed by USEPA for applicable particulate matter emission limits proposed and promulgated since November 15, 1990.	
<b>Verification of Operational Status</b>		DCS data is displayed to operators and alarm set points are established.	
<b>QA/QC Practices and Criteria</b>		Perform QA/QC and calibration per manufacturer’s specifications and recommended operation and maintenance practices.	
<b>Monitoring Frequency</b>		COMS data reduced to six-minute averages. Six-minute averages shall be calculated from 24 or more data points spaced out at approximately equal intervals over each six-minute period and shall be rounded to the nearest one percent. Data recorded during periods of system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages.	
<b>Data Collection Procedures and Averaging Period</b>		Continue operation of existing COMS. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS shall be in continuous operation and shall complete a minimum of one cycle of sampling and analyzing for each successive 15-second period and one cycle of data recording for each successive six-minute period.	

**Table III**

**PSEU 3**

<b>Unit ID:</b> REC14		<b>Unit Description:</b> Smelt Dissolving Tank – 400,000 lbs/day BLS		
<b>Control Device ID:</b> RECCD04		<b>Control Device Type:</b> Ducon Dynamic Scrubber; Size: 36, Type: UW4, Model: IV		
<b>Pollutant(s):</b> PM <sub>10</sub>				
<b>Regulatory Requirement:</b> Condition 19 of the 5/1/08 Permit Document				
<b>Most Stringent Limitation:</b> 0.12 lbs/ton BLS processed				
<b>CAM Description:</b> Scrubber fan amperage and scrubbing liquid flow rate are listed in 40 CFR 63.864 (e)(10)(iii) as appropriate control device performance indicators in accordance with 40 CFR Part 63, Subpart MM requirements for chemical recovery system process units using a wet scrubber for particulate matter control. Although Subpart MM does not apply to a semichemical Smelt Dissolving Tank, GP proposes that this continuous monitoring of PM also meet the requirements of CAM for PM <sub>10</sub> .				
<b>Indicators</b>		Scrubber fan amperage and scrubbing liquid flow rate		
<b>Measurement Approach</b>		Continuous monitoring of scrubber fan amperage and scrubber nozzle spray liquid flow rate using a data acquisition system following 40 CFR 60.13(h) data validation requirements.		
<b>Indicator Range</b>		<b>Scrubber fan amperage:</b> The current minimum fan amperage operating limit is 21 amps and is based upon the most recent compliance performance test, historical data and the manufacturer’s written recommendations. The minimum fan amperage operating limit may be re-established during a 3-hour compliance performance test and as follows: The minimum fan amperage operating limit will be established using one of the methods listed in 40 CFR 63.864(j)(5)(B)(1)-(3). An excursion is defined as any 3-hour block average period when the scrubber fan amperage is below the minimum operating limit. Records of fan amperage data shall be maintained and readily available for DEQ inspection.  All excursions will be reported as outlined in Condition 211 of the Title V permit.	<b>Scrubbing liquid flow rate:</b> The current minimum flow rate operating limit is 25 gallons per minute (GPM) and is based upon the most recent compliance performance test, historical data and the manufacturer’s written recommendations. The minimum scrubbing liquid flow rate may be re-established during a 3-hour compliance performance test and as follows: The minimum scrubbing liquid flow rate will be established using the method listed in 40 CFR 63.864(j)(5)(A). An excursion is defined as 3-hour block average period when the scrubber liquid flow rate is below the minimum operating limit. Records of the liquid flow rate data shall be maintained and readily available for DEQ inspection.  All excursions will be reported as outlined in Condition 211 of the Title V permit.	

<b>QIP Threshold</b>	A QIP is triggered if excursions occur greater than 5% of process operating time during each semi-annual reporting period.	
<b>Performance Criteria: Data Representativeness</b>	<b>Scrubber fan amperage:</b> Detector Location: Scrubber fan motor instrument loop 37II416.PV Range: 0 to 50 amps Accuracy: $\pm 0.5\%$ of transmitter range <b>Scrubbing liquid flow rate:</b> Detector Location: Scrubbing liquid flow meter 37FI409.PV Range: 0 to 40 GPM Accuracy: $\pm 0.25\%$ of transmitter range Acquisition Procedure: Continuous collection of data from process control field transmitters to the Recovery Furnace Distributed Control System (DCS). DCS data is displayed to operators and alarm set points are established.	
<b>Verification of Operational Status</b>	DCS data is displayed to operators and alarm set points are established.	
<b>QA/QC Practices and Criteria</b>	Perform flow meter and fan amperage transmitter QA/QC and calibrations per manufacturer's specifications and perform recommended operation and maintenance practices.	
<b>Monitoring Frequency</b>	Data is continuously monitored. 1-minute averages are constructed from six readings taken at 10-second intervals. A valid 1-hour block average consists of all the valid operating 1-minute block averages. A valid 1-hour block average shall be computed from at least four or more data points equally spaced over each 1-hour period (e.g., one valid minute in each 15-minute quadrant of the hour). A valid 3-hour block average is constructed as an arithmetic mean of valid 1-hour periods. Continuous parameter data from the DCS is converted into 1-minute, 1-hour, and 3-hour data blocks in the Recovery Furnace CEMS DAS using 40 CFR Part 60 data validation rules.	
<b>Data Collection Procedures and Averaging Period</b>	Data is collected by a data acquisition system and combined into 1-hour and 3-hour block averages.	